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United States

Agriculture Forest Service

Department of

Alaska Region Report Number 82 Species List

of Alaskan Birds, Mammals, Fish, Amphibians, Reptiles, and Invertebrates

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Alaska Region, Report 82 - Tamra Taylor species list

Species List of Alaskan Birds, Mammals, Freshwater and Anadromous Fish, Amphibians, Reptiles, and Commercially Important Invertebrates, by Tamra Faris Taylor. U.S. Department of Agriculture, Forest Service, Alaska Region, Wildlife and Fisheries Management Division (P.O. Box 1628, Juneau, Alaska 99802). November 1979, Alaska Region report number 82.

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Introduction

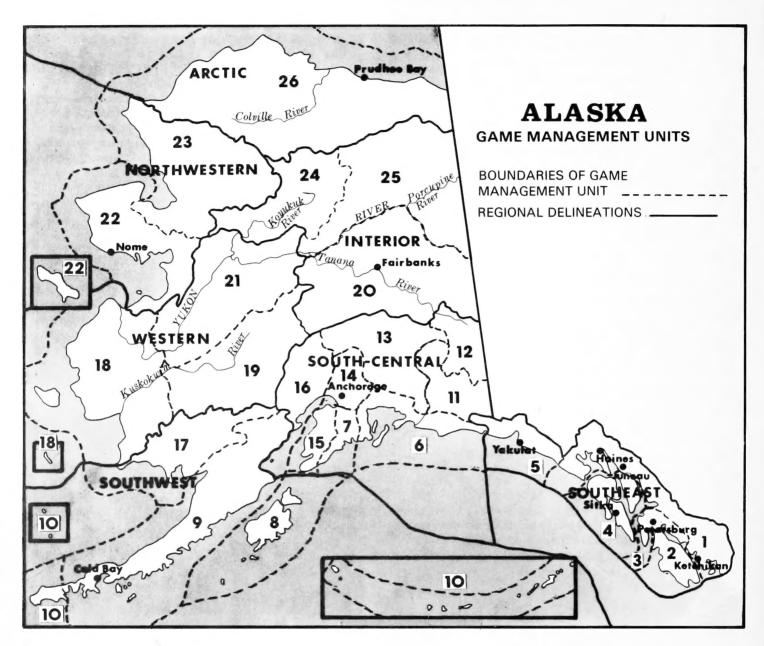
The Alaska Region of the Forest Service was assigned the task of assembling wildlife population supply, demand and habitat data by the Resource Planning Act (PL 93-378) of 1974, as amended by the National Forest Management Act (PL 94-588). This task was accomplished primarily in 1978 under the title "RPA Assessment of Wildlife and (Freshwater) Fish." Preparatory to that, the USDA Forest Service printed my "Species List of Alaskan Birds, Mammals, Fish, Amphibians and Reptiles" as an administrative report, dated August 1977. In the process of collecting data for the Assessment it was possible to greatly refine the original species list into one reflecting species occurrence by subregions within the State of Alaska and by ecosystem types throughout the State. Also incorporated into this new list are the whales and commercially important invertebrates. This Species List can be used as a checklist to indicate generally what species occur where and how numerously. The list is complete for amphibians, reptiles, birds and mammals. The fish list is limited to anadromous and freshwater species and a few marine species that frequently enter freshwaters. The many strictly marine fish species have been excluded. The same is true of the invertebrate list which covers only presently commercial species and a few species that may be commercially harvested in the near future. The list includes a total of 389 birds, 104 mammals, 58 fish, 6 amphibians, 2 reptiles, and 43 invertebrates.

Authorities for scientific name nomenclature were designated by the Forest Service National Coordinator. These authorities were used whenever possible. Regional authorities were supplemented to the designated ones as required for complete coverage. For the assessment, we were requested to "lump" rather than "split." Subspecies are not listed, with the exceptions of Canadian Geese and Peregrine Falcons. They are separated because they differ in terms of habitat requirements within a given ecosystem and some are on the list of threatened and endangered species. Authorities for nomenclature are listed at the end of each wildlife or fish group.

Part I of the list describes the abundance of wildlife and freshwater fish species in the seven major regions of Alaska: southeast, south-central, southwest, western, northwestern, interior and arctic (see map on page 2). The terms: common, uncommon, rare, and periphal are used to describe the relative abundance of each occurring in that region. For species that are migratory, and vary in abundance seasonally, the abundance code refers to the highest level of abundance observed during any season. References for species occurrence in these regions are given at the end of each wildlife or fish group. The status of each species (endangered, threatened, or defined by the Forest Service as sensitive to land management practices) is reported. Those species which are State regulated for commercial, sport, or subsistence use are indicated.

Part II of the list describes the occurrence of the same species by ecosystem. Ecosystem types were specified by the Forest Service National Coordinator for the RPA Assessment. Terrestrial ecosystems are based on the "Major Ecosystems of Alaska" as defined by the joint Federal State Land Use Planning Commission for Alaska, 1973. See page 51 for details. Aquatic ecosystems were defined by a Forest Service committee working on the Assessment. They are defined in the narrative (page 52) preceding their use. Where applicable, indications are made in both terrestrial and aquatic ecosystems to better depict species requirements. References for species occurrence in these ecosystems are given at the end of each wildlife and fish group.

Wildlife and freshwater fish ranges and abundance are not nearly so well known as these lists may indicate. They are subject to further review and interpretation. Wherever specific questions arise the original references should be consulted.



This map depicts the seven regions of the State as it is divided for this species list.

Numbers correspond with game management units as used by Alaska Department of Fish and Game.

Part I:

Frequency of Occurrence of Alaskan Species by Region

Definition of terms and symbols

Wildlife and freshwater fish are classified by their frequency of occurrence in each of the seven regions of Alaska (southeast, south-central, southwest, western, northwestern, interior, arctic - as defined on the Alaska map, page 2). The terms common, uncommon, rare, and peripheral are used to describe the relative abundance of each species occurring in that region. A status of common was based upon a species occurrence throughout a large portion of the region in relatively moderate to high numbers. A status of uncommon was reported when a species range was limited, regardless of local density or occurrence in relatively low numbers throughout a large area. A status of rare indicates that the species occurs regularly within the region, but in very small numbers. The status peripheral means the species is on the geographic edge of its distribution. It usually has been recorded only a few times, but irregular observations are likely over a period of years. For species that are migratory and vary in abundance seasonally, the abundance code refers to the highest level of abundance observed during any season.

The frequency designations are arbitrary at best, purely the results of impression gained from available literature and consultation with professional biologists. They do not represent numerical status, but rather the frequency that a given species is seen in relation to related species and/or unrelated species utilizing the habitat niches. For example, the bald eagle and barn swallow are both listed as common in southeast Alaska, even though the latter occurs in much greater numbers.

The references for species frequency of occurrence by Alaskan region are cited after the authorities for nomenclature list at the end of each wildlife or fish group.

The status of Alaskan wildlife and fish species (Column 1 on the list) and the State regulations for the species (Column 2 on the list) are reported. The species status is classified if endangered, threatened, or sensitive. Species on the Federal or State threatened and endangered lists and those species defined by the Forest Service as sensitive to land or water management practices are indicated. A sensitive-to-management species is defined as a species which is presently classified or likely to be classified as rare, or known to be adversely affected by management practices, or known or may reasonably be expected to occur in such limited habitats and in such low numbers that management activities might directly or ultimately adversely affect population levels.

State regulations concern consumptive and non-consumptive use of Alaskan wildlife and fish. Some species are used commercially or for subsistence. Subsistence use means the use of wildlife or fish for direct personal or family consumption as food, shelter, fuel, clothing, tools, transportation, for the making and selling of handicraft articles, and for trade or barter. Recreational use includes those species used recreationally and consumed as well as those species used non-consumptively for recreation. Species not generally used by man for consumptive or non-consumptive purposes are indicated.

Symbol legends are reproduced throughout the checklist.



TABLE I BIRDS OF ALASKA, Occurrence by Region

							cern		
	Species Status	State Reg.'s	Southeas	Southcen	Southwest	Western	Workhiness	Interior	Arctic
ORDER GAVIIFORMES									
Common Loon Gavia immer	×	R2	C*	C*	U*	U*	U*	C*	Р
Yellow-billed Loon Gavia adamsii	×	R2	U	U	R	U	U*	Р	U*
Arctic Loon Gavia arctica	X	R2	С	C*	C*	C*	C*	C*	C*
Red-throated Loon Gavia stellata	×	R2	C*	C*	C*	C*	C*	U*	C*
ORDER PODICIPEDIFORMES									
Red-necked Grebe Podiceps grisegena	×	R2	С	C*	U*	U*	U*	C*	P*
Horned Grebe Podiceps auritus	×	R2	С	C*	C*	U*	U*	*	Р
Western Grebe Aechmophorus occidentalis	×	R2	U	Р					
Pied-billed Grebe Podilymbus podiceps	×	X	R	Р					
ORDER PROCELLARIIFORMES									
Short-tailed Albatross Diomedea albatrus	FE SE	X	Р	Р	Р				
Black-footed Albatross Diomedea nigripes	×	R2	С	С	С	R	R		
Laysan Albatross Diomedea immutabilis	×	R2	R	R	U	R			
Northern Fulmar Fulmarus glacialis	×	R2	U	С	C*	С	С		R
Pink-footed Shearwater Puffinus creatopus	×	X	R	R					
Flesh-footed Shearwater Puffinus carneipes	X	×		Р	Р				
New Zealand Shearwater Puffinus bulleri	×	R2		R					
Sooty Shearwater Puffinus griseus	×	R2	С	С	С				
Short-tailed Shearwater Puffinus tenuirostris	×	R2	R	С	С	С	С		R

	Species Status	State Reg.'s	Southeast	Southcent	Southwest	Western	Northneste	Interior	Arctic
ORDER PROCELLARIIFORMES (Cont.)									
Manx Shearwater Puffinus puffinus	X	×		Р					
Scaled Petrel Pterodroma inexpectata	X	×	U	U	U	R			
Cook's Petrel Pterodroma cookii	X	X			Р				
Fork-tailed Storm-Petrel Oceanodroma furcata	X	R2	C*	C*	C*	U	Р		
Leach's Storm-Petrel Oceanodroma leucorhoa	X	R2	C*	R*	C*				
ORDER PELECANIFORMES									
Double-crested Cormorant Phalacrocorax auritus	X	R2	U*	C*	C*				
Brandt's Cormorant Phalacrocorax penicillatus	×	X	P*	R*					
Pelagic Cormorant Phalacrocorax pelagicus	X	R2	C*	C*	C*	C*	C*		R
Red-faced Cormorant Phalacrocorax urile	X	R2		C*	C*	Р			
ORDER CICONIIFORMES									
Great Blue Heron Ardea herodias	X	R2	U*	U*				Р	Р
Chinese Egret Egretta eulophotes (Auth. 4)	X	×			Р				
Snowy Egret Egretta thula	X	X	Р						
American Bittern Botaurus lentiginosus	Х	X	R*						
ORDER ANSERIFORMES									
Whooper Swan Olor cygnus	×	X		Р	R	R			
Whistling Swan Olor columbianus	×	R2	С	С	C*	C*	U*	C*	C*
Trumpeter Swan Olor buccinator	×	R2	U*	C*	Р	P*		U*	R*
Canada Goose, Vancouver Branta canadensis fulva	X	R1	C*						

	Species Status	State Reg.'s	Southead	Southce	Southwe	Western	Workhare!	zern Interior	Arctic
ORDER ANSERIFORMES (Cont.)									
Canada Goose, Dusky Branta canadensis occidentalis	X	R1	С	C*					
Canada Goose, Aleutian Branta canadensis leucopareia	FE SE	X	U	U	U*				
Canada Goose, Cackling Branta canadensis minima	×	R1	U	U	С	C*			
Canada Goose, Taverner's Branta canadensis taverneri	×	R1					C*		C*
Canada Goose, Lesser Branta canadensis parvipes	×	R1	U	C*	U*	C*		C*	
Brant <i>Branta bernicla</i>	X	R1	U	С	С	C*	C*	Р	C*
Emperor Goose Philacte canagica	X	R1	Р	R	C*		C*		R
White-fronted Goose Anser albifrons	X	R1	С	C*	C*	C*	C*	C*	C*
Bean Goose Anser fabalis	×	X			R	Р			
Snow Goose Chen caerulescens	×	R1	U	С	С	C*	C*	С	C*
Ross' Goose Chen rossii	×	×	Р						Р
Mallard Anas platyrhynchos	×	R1	C*	C*	C*	C*	C*	C*	R*
Elack Duck Anas rubripes	X	×	Р	Р				Р	
Spotbill Duck Anas poecilorhyncha (Auth. 4)	X	X			Р				
Gadwall Anas strepera	×	R1	U*	C*	U*	Р		R	Р
Pintail <i>Anas acuta</i>	X	R1	C*	C*	C*	C*	C*	C*	C*
Falcated Teal Anas falcata	×	X			Р				
Green-winged Teal Anas crecca	X	R1	C*	C*	C*	C*	C*	C*	U*
Baikal Teal Anas formosa	×	X			Р	Р	Р		Р
Garganey Anas querquedula (Auth. 4)	X	X			R				

	Species Status	State Reg.'s	Southeas	Southcen	Southwee	Western	Morehmes	ln ^{eriot}	Arceic .
ORDER ANSERIFORMES (Cont.)									
Blue-winged Teal Anas discors	X	R1	U*	R*	Р			U*	
Cinnamon Teal Anas cyanoptera	X	×	R	Р				Р	
Northern Shoveler Anas clypeata	X	R1	U*	C*	R	U*	U*	C*	R*
European Wigeon Anas penelope	X	×	R	R	U	R	R	R	
American Wigeon Anas americana	X	R1	C*	C*	U*	C*	C*	C*	C*
Wood Duck Aix sponsa	X	×	Р						
Redhead <i>Aythya americana</i>	X	R1	R	R*	Р	Р		U*	Р
Common Pochard <i>Aythya ferina</i>	×	×			R				
Ring-necked Duck Aythya collaris	×	R1	U*	R	Р	Р		R*	Р
Canvasback <i>Aythya valisineria</i>	×	R1	R	U*	R	R		U*	
Greater Scaup Aythya marila	×	R1	C*	C*	C*	C*	C*	C*	U÷
Lesser Scaup Aythya affinis	×	R1	C*	R	Р	R*	R*	C*	Р
Tufted Duck <i>Aythya fuligula</i>	×	×		Р	R	Р	Р		è
Common Goldeneye Bucephala clangula	FS	R1	C*	C*	C*	U		C *	Р
Barrow's Goldeneye Bucephala islandica	FS	R1	C*	C*	C*			C *	
Bufflehead Bucephala albeola	FS	R1	C*	C*	C*	R*		C ~	
Oldsquaw Clangula hyemalis	×	R1	C*	C*	C*	C*	C*	C*	C*
Harlequin Duck Histrionicus histrionicus	×	R1	C*	C*	C*	U*	U*	U*	R*
Steller's Eider Polysticta stelleri	×	R1	Р	С	С	C*			U*
Common Eider Somateria mollissima	×	R1	R*	U*	C*	C*	C*		C*
King Eider Somateria spectabilis	×	R1	Р	U	С	C*	C*		C*

Table 1 — 5									
	Species Status	State Reg.'s.	Southeast	Southcen	Southwest	Mestern	Northwest	Interior	Arctic
ORDER ANSERIFORMES (Cont.)									
Spectacled Eider Somateria fischeri	X	R1	Р		R	C*	C*		U*
White-winged Scoter Melanitta deglandi	×	R1	С	C*	С	U*		C ⁺	U*
Surf Scoter Melanitta perspicillata	×	R1	С	С	С	C*	C*	C*	U*
Black Scoter Melanitta nigra	X	R1	U	С	C*	C*	C*	Р	Р
Ruddy Duck <i>Oxyura jamaicensis</i>	X	×	Р					Р	
Hooded Merganser Lophodytes cucullatus	FS	R2	U*	R	Р			R	
Smew Mergellus albellus	X	×		Р	R				
Common Merganser <i>Mergus merganser</i>	FS	R2	C*	C*	C*			R*	
Red-breasted Merganser Mergus serrator	X	R2	C*	C*	C*	C*	C*	R*	R
ORDER FALCONIFORMES									
Goshawk Accipiter gentilis	X	R2	U*	U*	U*	R	R	U*	
Sharp-shinned Hawk Accipiter striatus	X	R2	C*	C*	Р	R*	R*	C*	
Red-tailed Hawk Buteo jamaicensis	X	R2	U*	R*	Р	Р		C*	Р
Swainson's Hawk Buteo swainsoni	X	×		Р				R*	
Rough-legged Hawk Buteo lagopus	X	R2	U	R	C*	C*	C*	C*	C*
Golden Eagle Aquila chrysaetos	FS	R2	R*	R*	U*	U*	U*	C*	U*
White-tailed Eagle Haliaeetus albicilla	X	X			Р				
Bald Eagle Haliaeetus leucocephalus	FS	R2	C*	C*	C*	R*	R*	U*	Р
Steller's Sea Eagle Haliaeetus pelagicus	X	×			Р				
Marsh Hawk Circus cyaneus	X	R2	U	C*	U*	U*	U*	U*	R*
Osprey Pandion haliaetus	X	×	R*	R*	R*	R*	R*	R*	Р

	Species Status	State Reg.'s	Southeas	Southeen	Southwee	Western	Northwee	sern Interior	Arceic A
ORDER FALCONIFORMES (Cont.)									
Gyrfalcon Falco rusticolus	X	R2	R	R*	U*	U*	U*	U*	Р
Peregrine Falcon, American Falco peregrinus anatum	SE FE	R2					R*	R	R*
Peregrine Falcon, Peale's Falco peregrinus pealei	X	R2	U*	U*	C*				
Peregrine Falcon, Tundra Falco peregrinus tundrensis	SE FE	R2						R*	R*
Merlin Falco columbarius	X	R2	U*	R*	U*	R*		U*	R
American Kestrel Falco sparverius	X	R2	С	R				C*	Р
ORDER GALLIFORMES									
Blue Grouse Dendragapus obscurus	×	R1	C*						
Spruce Grouse Canachites canadensis	×	R1	R*	U*	R*	R*		C*	
Ruffed Grouse Bonasa umbellus	X	R1	Р					C*	
Willow Ptarmigan <i>Lagopus lagopus</i>	X	R1	U*	U*	C*	C*	C*	C*	C*
Rock Ptarmigan Lagopus mutus	X	R1	C *	C *	C*	C*	C*	C [*]	U
White-tailed Ptarmigan Lagopus leucurus	X	R1	U*	R*				U *	
Sharp-tailed Grouse Pedioecetes phasianellus	X	R1						U*	
ORDER GRUIFORMES									
Common Crane Grus grus	×	Х						Р	
Sandhill Crane Grus canadensis	X	R1	C*	C*	C*	C*	C*	C*	U*
Sora Porzana carolina	×	X	R*					Р	
European Coot Fulica atra	×	Х			Р				
American Coot Fulica americana	X	X	R	Р	Р			R	Р

Table 1 — 7					_			.0	
	Species Status	State Reg.'s	Southeast	Southeen	Southnest	Nestern	Morthwest	Interior	Arctic
ORDER CHARADRIIFORMES									
Black Oystercatcher Haematopus bachmani	X	R2	C*	C*	C*				
Ringed Plover Charadrius hiaticula	X	×			Р		Р		
Semipalmated Plover Charadrius semipalmatus	X	R2	C*	C*	C*	C*	C*	C*	U*
Little Ringed Plover <i>Charadrius dubius</i> (Auth. 4)	×	X			Р				
Mongolian Plover Charadrius mongolus	×	×		Ρ	R	R*	R*		Р
Killdeer Charadrius vociferus	X	R2	U*	R*	Р	Р		R*	Р
Dotterel Eudromias morinellus	×	×			Р	R*	R*		Р
American Golden Plover Pluvialis dominica	×	R2	U	С	С	C*	C*	C*	C*
Black-bellied Plover Pluvialis squatarola	×	R2	С	С	С	C*	C*	R	U*
Black-tailed Godwit Limosa limosa	×	×			Р		Р		
Hudsonian Godwit <i>Limosa haemastica</i>	×	R2	R	U	Р	U*	U*	R	R
Bar-tailed Godwit Limosa lapponica	×	R2	Р	R	С	C*	C*		U*
Marbled Godwit <i>Limosa fedoa</i>	×	X	R	R	R*				
Eskimo Curlew Numenius borealis	SE FE	X			Р				
Whimbrel Numenius phaeopus	×	R2	U	С	С	C*	C*	C*	U*
Bristle-thighed Curlew Numenius tahitiensis	×	R2	Р	Р	R	U*		Р	
Far Eastern Curlew Numenius madagascariensis (Auth. 4)	×	X			R	Р			
Upland Sandpiper <i>Bartramia americana</i>	X	R2	Р	Р				U*	
Redshank <i>Tringa totanus</i>	×	R2			Р				
Marsh Sandpiper <i>Tringa stagnatilis</i> (Auth. 4)	X	X			Р				

Table 1 — 8	Species Status	State Reg.'s	Southeas	Southcen	Southwest	Nestern	Morethweel	Interior	Arctic
ORDER CHARADRIIFORMES (Cont.)									
Greenshank <i>Tringa nebularia</i>	×	×			R				
Greater Yellowlegs Tringa melanoleuca	×	R2	C*	C*	C*	R*		R*	
Lesser Yellowlegs Tringa flavipes	×	R2	C*	C*	R	U*	U*	C*	Р
Solitary Sandpiper Tringa solitaria	X	R2	U*	U*	R*	R*	Р	U*	Р
Wood Sandpiper <i>Tringa glareola</i>	×	×			R*		R		Р
Willet Catoptrophorus semipalmatus	×	×						Р	
Terek Sandpiper <i>Xenus cinereus</i> (Auth. 4)	X	X		Р	R	R	R		
Common Sandpiper Tringa hypoleucos (Auth. 4)	X	R2			R		R		
Spotted Sandpiper Actitis macularia	X	R2	C*	C *	U*	υ.	U	C.	U*
Polynesian Tattler <i>Heteroscelus brevipes</i>	×	X			R		R		Р
Wandering Tattler Heteroscelus incanus	×	R2	U	С.	U.	U.	υ.	U.	Р.
Ruddy Turnstone Arenaria interpres	×	R2	U	С	С	C 1	C.	R	U*
Black Turnstone Arenaria melanocephala	×	R2	С	С	C *	C.	C	Р	
Wilson's Phalarope Steganopus tricolor	X	×	Р					Р	Р
Northern Phalarope Lobipes lobatus	×	R2	С	C*	C*	C*	C.	C*	C*
Red Phalarope <i>Phalaropus fulicarius</i>	×	R2	R	С	С	C*	C.	Р	C*
Common Snipe Gallinago gallinago	×	R1	C*	C*	C*	C*	C*	C*	C*
European Jacksnipe Lymnocryptes minimus	×	X			Р				
Short-billed Dowitcher Limnodromus griseus	×	R2	С	C*	C*				
Long-billed Dowitcher Limnodromus scolopaceus	X	R2	U	С	U	C*	C*	C*	C*
Surfbird Aphriza virgata	×	R2	R	C*	R	R*		U*	

Table 1 — 9								.0	
	Species Status	State Reg.'s	Southeas	Southcen	Southweek	Western	Morthhesi	e' Interior	Aichic
ORDER CHARADRIIFORMES (Cont.)									
Great Knot Calidris tenuirostris	X	X			Р		Р		
Red Knot Calidris canutus	X	R2	R	С	R	U*	R*		R*
Sanderling Calidris alba	×	R2	U	U	U	U	U	R	U*
Semipalmated Sandpiper Calidris pusilla	X	R2	U	U	R	U*	U*	C*	C*
Western Sandpiper Calidris mauri	×	R2	С	С	С	C*	C*	R⁺	U+
Rufous-necked Sandpiper Calidris ruficollis	×	×	Р	Р	R	R*	R*		R⁺
Little Stint Calidris minuta (Auth. 4)	X	R							Р
Temminck's Stint Calidris temminckii (Auth. 4)	×	R2			R		R		
Long-toed Stint Calidris subminuta	X	×			R		R		
Least Sandpiper Calidris minutilla	×	R2	C*	C*	C*	U*	U*	C*	U*
White-rumped Sandpiper Calidris fuscicollis	×	×		Р				R	R*
Baird's Sandpiper Calidris bairdii	×	R2	U	U	U	U*	U*	U*	C*
Pectoral Sandpiper Calidris melanotos	×	R2	С	С	С	C*	C*	С	C*
Sharp-tailed Sandpiper Calidris acuminata	×	R2	Р	R	U	U*	U		Р
Rock Sandpiper Calidris ptilocnemis	×	R2	С	С	C*	C*	C*		
Dunlin Calidris alpina	×	R2	С	C*	C*	C*	C*	Р	U*
Curlew Sandpiper Calidris ferruginea	×	X		Р	Р	Р	Р		R*
Spoon-bill Sandpiper Eurynorhynchus pygmeus	×	X			Р				Р
Broad-billed Sandpiper Limicola falcinellus	Х	X			Р				
Stilt Sandpiper Micropalama himantopus	×	×	Р	Р	Р	Р		R	R*

Table 1 — 10								0	
	Species Status	State Reg.'s	Southeast	Southcer	Southwest	Nestern	Northwest	Interior	Arctic Arctic
ORDER CHARADRIIFORMES (Cont.)									
Buff-breasted Sandpiper Tryngites subruficollis	X	R2	Р	Р	Р	Р	Р	R	R*
Ruff Philomachus pugnax	×	×		Р	R	R	R		Р
Pomarine Jaeger Stercorarius pomarinus	X	R2	R	С	С	C*	C*	Р	U*
Parasitic Jaeger Stercorarius parasiticus	×	R2	U*	C*	C*	C*	C*	R	C*
Long-tailed Jaeger Stercorarius longicaudus	×	R2	R	R*	U*	C*	C*	C*	C*
South Polar Skua Catharacta maccormicki	×	×		R	R				Р
Glaucous Gull Larus hyperboreus	×	R2	R	R	U*	C*	C*	R	C*
Glaucous-winged Gull Larus glaucescens	×	R2	C*	C *	C*	C*	C*	R	
Slaty-backed Gull Larus schistisagus	X	×			R	R	R		R
Western Gull Larus occidentalis	×	×			Р				
Herring Gull Larus argentatus	×	R2	C *	C *	R	R [≁]	R⁺	U	P*
Thayer's Gull Larus thayeri	×	×	С	R	Р				R
California Gull <i>Larus californicus</i>	×	X	R						
Ring-billed Gull Larus delawarensis	×	×	R	R	Ρ			Р	
Mew Gull Larus canus	×	R2	С,	C⁺	C*	C ⁺	C.	C*	R*
Black-headed Gull Larus ridibundus	×	R2		Р	R		R		Р
Franklin's Gull Larus pipixcan	X	×		Р	Р				
Bonaparte's Gull Larus philadelphia	×	R2	C*	C*	C*	C*	C*	U *	
Ivory Gull Pagophila eburnea	X	R2	Р	Р	R	U	U		U
Black-legged Kittiwake Rissa tridactyla	×	R2	U*	C*	C*	C*	C*	Р	С
Red-legged Kittiwake Rissa brevirostris	X	R2		Р	C*	R		Р	

Table 1 — 11					(8)		. 6	rn.	
	Species Status	State Reg.'s	Southeast	Southcent	Southwest	Nesterl	Moreharest	Interior	Arcolo
ORDER CHARADRIIFORMES (Cont.)									
Ross' Gull Rhodostethia rosea	X	R2			Р		R		С
Sabine's Gull Xema sabini	X	R2	R	U	U*	C+	C ⁺	P	C*
Common Tern Sterna hirundo	X	X			R		Р		
Arctic Tern Sterna paradisaea	×	R2	C*	C*	C*	C*	C*	U*	U÷
Aleutian Tern Sterna aleutica	×	R2	P*	U*	U*	U÷	U*		
Black Tern Chlidonias niger	X	×	Р	Р					Р
White-winged Black Tern Chlidonias leucopterus	×	X			Р				
Common Murre <i>Uria aalge</i>	×	R2	C*	C*	C*	C ⁺	C*	Р	Р
Thick-billed Murre <i>Uria lomvia</i>	×	R2	R	R*	C*	C*	C*		R
Dovekie Alle alle	×	X			Р		R		P
Black Guillemot Cepphus grylle	X	R2			R	UŤ	U*	Р	U*
Pigeon Guillemot Cepphus columba	X	R2	C*	C*	C*	C*	C*		
Marbled Murrelet Brachyramphus marmoratus	×	R2	C*	C*	U*		Р		
Kittlitz's Murrelet Brachyramphus brevirostris	×	R2	U*	C*	U*	U*	U*		R
Ancient Murrelet Synthliboramphus antiquus	×	R2	U*	U*	C*	R	R		
Cassin's Auklet Ptychoramphus aleuticus	×	R2	U*	R	C*				
Parakeet Auklet Cyclorrhynchus psittacula	×	R2	R	U*	C*	C*	C*		Р
Crested Auklet Aethia cristatella	×	R2		U	C*	C*	C*		R
Least Auklet Aethia pusilla	X	R2			C*	C*	C*		Р
Whiskered Auklet Aethia pygmaea	X	R2			U*		Р		
Rhinoceros Auklet Cerorhinca monocerata	X	R2	U*	R*	R*				

Table 1 — 12	,¢						-see th		
	Species Status	State Reg.'s	Southeas	Southcen	Southwes	Nestern	Northwest	Interior	Arctic
ORDER CHARADRIIFORMES (Cont.)									
Horned Puffin Fratercula corniculata	×	R2	R*	U*	C*	C*	C*		R
Tufted Puffin Lunda cirrhata	X	R2	U*	C*	C*	C*	C*		Р
ORDER COLUMBIFORMES									
Band-tailed Pigeon Columba fasciata	X	X	R*				Р		
Rock Dove Columba livia	X	X	C*	C*				U*	
Mourning Dove Zenaida macroura	X	X	R	R	Р		Р	R	
ORDER CUCULIFORMES									
Common Cuckoo Cuculus canorus (Auth. 4)	X	X			Р				
Oriental Cuckoo Cuculus saturatus	X	X			Ρ	Р			
ORDER STRIGIFORMES									
Scops Owl Otus scops	X	X			Р				
Screech Owl Otus asio	X	X	R	Р					
Great Horned Owl Bubo virginianus	X	R2	C -	C *	U	U.	U ⁺	C*	Р
Snowy Owl <i>Nyctea scandiaca</i>	X	R2	U	U	U	U.	U	R	U
Hawk Owl Surnia ulula	X	R2	U	U *	U	υ.	U -	C*	
Pygmy Owl Glaucidium gnoma	×	X	R	Р					
Barred Owl Strix varia	X	×	Р						
Great Gray Owl Strix nebulosa	X	R2	R*	R*				R*	
Long-eared Owl Asio otus	X	X	Р						
Short-eared Owl Asio flammeus	X	R2	С	C*	C*	C*	C*	C*	C*
Boreal Owl Aegolius funereus	X	R2	U	U*	U*		R	C*	

Table 1 — 13	Species Status	State Reg.'s	Solisheas	Southcer	Souther	Nestern	Morethale	Jern Interior	Arceic
ORDER STRIGIFORMES (Cont.)									
Saw-whet Owl Aegolius acadicus	×	X	R*	R*	Р		Р		
ORDER CAPRIMULGIFORMES									
Jungle Nightjar Caprimulgus indicus (Auth. 4)	Χ	×			Р				
Whip-poor-will Caprimulgus vociferus	X	×	Р						
Common Nighthawk Chordeiles minor	×	X	R	Р				Р	Р
ORDER APODIFORMES									
Black Swift Cypseloides niger	X	X	R*	Р					
Vaux's Swift <i>Chaetura vauxi</i>	X	R2	U ⁺	Р					
White-throated Needle-tailed Swift Hirundapus caudacutus	X	X			Р				
White-rumped Swift Apus pacificus	X	X			Р				
Common Swift Apus apus	X	×			Р				
Ruby-throated Hummingbird Archilochus colubris	X	X					Р		
Anna's Hummingbird Calypte anna	X	X	R	Р					
Rufous Hummingbird Selasphorus rufus	X	R2	C*	C*				Р	
ORDER CORACHFORMES									
Belted Kingfisher Megaceryle alcyon	×	R2	C*	U*	U*	U*		C*	
Hoopoe <i>Upupa epops</i> (Auth. 4)	X	X				Р			
ORDER PICIFORMES									
Wryneck <i>Jynx torquilla</i>	X	X					Р		
Common Flicker Colaptes auratus	FS	R2	U*	U*			Р	C*	Р
Yellow-bellied Sapsucker Sphyrapicus varius	FS	R2	U*	P				Р	

Table 1 — 14								^	
	Species Status	State Reg.'s	Southeast	Southeen	southwest	Western.	NOrthwest	Interior	Arctic
ORDER PICIFORMES (Cont.)									
Hairy Woodpecker Picoides villosus	FS	R2	U*	U*				U*.	
Downy Woodpecker Picoides pubescens	FS	R2	U*	U*	R*	R*		U*	
Black-backed Three-toed Woodpecker Picoides arcticus	FS	X	R	Р	Р			R*	
Northern Three-toed Woodpecker Picoides tridactylus	FS	R2	U*	R*	U*	U*	U*	U*	
ORDER PASSERIFORMES									
Eastern Kingbird Tyrannus tyrannus	×	×	R	Р	Р	Р	Р	Р	Р
Western Kingbird Tyrannus verticalis	X	X	Р	Р				Р	
Say's Phoebe Sayornis saya	X	R2	R *	R*	Р	U*	U*	U ⁺	U*
Yellow-bellied Flycatcher Empidonax flaviventris	X	×						Р	
Alder Flycatcher Empidonax alnorum	X	R2	U *	U*	U*		U*	C*	Р
Hammond's Flycatcher Empidonax hammondii	X	R2	U*					C *	Ρ
Dusky Flycatcher Empidonax oberholseri	X	×							Р
Western Flycatcher Empidonax difficilis	×	R2	C *	Р					
Western Wood Pewee Contopus sordidulus	X	R2	UŤ	R`			Р	U ·	Р
Olive-sided Flycatcher Nuttallornis borealis	×	R2	U*	R*	R*	R*	R*	U*	Р
Skylark <i>Alauda arvensis</i>	×	×			R*				
Horned Lark Eremophila alpestris	×	R2	U*	R	R*		U*	C*	U*
Violet-green Swallow Tachycineta thalassina	×	R2	C*	C*	U*			C*	Р
Tree Swallow Iridoprocne bicolor	X	R2	C*	C*	C*	C*	C*	C*	Р
Bank Swallow <i>Riparia riparia</i>	X	R2	R*	U*	U*	U*	U*	C*	Р
Rough-winged Swallow Stelgidopteryx ruficollis	×	×	R*	Р	Р				Р

Table 1 — 15					18			er.	
	Species Status	State Reg.'s	Southeas	Southcer	Southweek	Western	40 threes	Interior	Arctic
ORDER PASSERIFORMES (Cont.)									
House Martin Delichon urbica	×	×			Р				Р
Barn Swallow <i>Hirundo rustica</i>	×	R2	C*	C ⁺	Р	Р	P	Ρ	Р
Cliff Swallow Petrochelidon pyrrhonota	×	R2	R*	U*	U ⁺	U*	U÷	C+	U÷
Purple Martin Progne subis	×	×		Р	Р	Р	Р	Р	Р
Gray Jay Perisoreus canadensis	×	R2	R	R [↑]	U*		U÷	C ⁺	Р
Steller's Jay Cyanocitta stelleri	×	R2	C*	C*					
Black-billed Magpie Pica pica	×	R2	C ⁺	C*	C*	R		C⁺	Р
Common Raven Corvus corax	×	R2	C*	C*	C [≠]	C⁺	C *	C*	C*
Northwestern Crow Corvus caurinus	×	R2	C*	C*	R⁺				
Clark's Nutcracker Nucifraga columbiana	×	×	Р		Р	Р	Р		
Black-capped Chickadee Parus atricapillus	×	R2	U*	U*	U*	U*	U*	C*	Р
Mountain Chickadee Parus gambeli	×	×	Р						
Gray-headed Chickadee Parus cinctus	×	×				R*	R*	R*	
Boreal Chickadee Parus hudsonicus	×	R2	Р	R*	U*		U*	C*	
Chestnut-backed Chickadee Parus rufescens	×	R2	C*	C*					
Red-breasted Nuthatch Sitta canadensis	×	R2	U*	U*	Р		Р	R	
Brown Creeper Certhia familiaris	×	R2	U*	U*	U*			R⁺	
Dipper Cinclus mexicanus	×	R2	C*	C*	C ⁺	U ⁺	U*	U ⁺	R*
Winter Wren Troglodytes troglodytes	×	R2	C*	U*	C*				Р
Brown Thrasher Toxostoma rufum	×	×							Р
American Robin Turdus migratorius	×	R2	C*	C*	C*	C*	C*	C*	R*

Table 1 — 16								^	
	Species Status	State Reg.'s	Southeast	Southcent	Southwest	Western	Morthweste	Interior	Arctic
ORDER PASSERIFORMES (Cont.)									
Eye-browed Thrush <i>Turdus obscurus</i> (Auth. 3)	×	×			R		Р		Р
Dusky Thrush <i>Turdus naumanni</i> (Auth. 4)	×	×			Р		Р		Р
Fieldfare <i>Turdus pilaris</i>	×	×							Р
Varied Thrush Ixoreus naevius	×	R2	C*	C*	C*	C*	C*	C.	Р
Hermit Thrush Catharus guttatus	X	R2	C*	C.	C *	R*	R⁺	U	Р
Swainson's Thrush Catharus ustulatus	X	R2	C *	U	U*	R*	R*	C.	
Gray-cheeked Thrush Catharus minimus	×	R2	R*	U	C*	C*	С.	С.	С.
Mountain Bluebird Sialia currucoides	×	×	R			Р		R ⁺	Р
Wheatear Oenanthe oenanthe	X	R2	Р	R-	R	C*	C.	U ·	υ.
Bluethroat Luscinia svecica	×	R2					R.		R°
Siberian Rubythroat <i>Luscinia calliope</i>	×	×			R	Р			
Townsend's Solitaire Myadestes townsendi	×	R2	R†	R.				ñ	
Willow Warbler Phylloscopus trochilus	×	×							٦
Dusky Warbler Phylloscopus fuscatus	×	×					٦		
Arctic Warbler Phylloscopus borealis	×	R2			U	C₹	С.	C.	С.
Middendorff's Grasshopper Warbler Locustella ochotensis	×	×				Р			
Golden-crowned Kinglet Regulus satrapa	×	R2	C*	U	υ.			R	
Ruby-crowned Kinglet Regulus calendula	×	R2	C*	C*	R*	U*	U	U ⁺	Р
Red-breasted Flycatcher Ficedula parva	×	×			Р		Р		
Sooty Flycatcher Muscicapa sibirica	×	X			Р				

145.0					.8			OKC	
	Species Status	State Reg.'s	Southead	Southces	Southing	Western	Morehare	Interior	Archic
ORDER PASSERIFORMES (Cont.)									
Gray-spotted Flycatcher Muscicapa griseisticta	×	X			R				
Mountain Accentor Prunella montanella	X	X				Р	Р		Р
White Wagtail Motacilla alba	×	X	Р		R	R*	R ⁺	Р	R
Gray Wagtail Motacilla cinerea (Auth. 4)	X	X			Р		Р		•
Yellow Wagtail <i>Motacilla flava</i>	×	R2		Р	R	C*	C*	Р	U÷
Water Pipit Anthus spinoletta	×	R2	C ⁺	C*	C*	C*	C*	C*	C+
Indian Tree Pipit Anthus hodgsoni (Auth. 4)	X	×			Р		Р		
Pechora Pipit Anthus gustavi	×	X					Р		
Red-throated Pipit Anthus cervinus	×	×			R	U*	U*		Р
Bohemian Waxwing Bombycilla garrulus	×	R2	U ⁺	U*	R*	R*	R*	C*	
Cedar Waxwing Bombycilla cedrorum	×	R2	R*						
Brown Shrike Lanius cristatus	×	×					Р		
Northern Shrike Lanius excubitor	×	R2	U	U+	C*	U*	U ⁺	U÷	U*
Starling Sturnus vulgaris	×	×	U*	R		Р		R*	
Red-eyed Vireo Vireo olivaceus	×	×	R*	Р					
Warbling Vireo Vireo gilvus	×	×	U	Р					
Black-and-white Warbler <i>Mniotilta varia</i>	×	×							Р
Tennessee Warbler Vermivora peregrina	×	×	R*	Р				Р	
Orange-crowned Warbler Vermivora celata	×	R2	C*	C*	C*	U*	U*	C*	Р
Yellow Warbler Dendroica petechia	×	R2	C*	U*	C*	C*	C*	C*	R*

		,						
Species Status	State Reg.'s	Southeast	Southcen	Southwest	Nestern	NOrthwest ⁶	Interior	Arctic A
X	X	Р			Р			Р
×	X	Р					Р	Р
×	R2	C*	U*	U*	C*	C*	C*	Р
×	R2	U*	U*	Р			C*	Р
×	×	Р						
×	×						Р	
X	R2	R	R*	C*	C*	C *	U*	Р
X	R2	R*	R*	C*	C ⁺	С*	C*	Р
X	R2	U*						Ρ
×	R2	U	Р				Р	
×	R2	C *	C*	C*		U	C*	Р
×	×							Ρ
×	×	UŤ					Р	
×	×							Ρ
×	×	Р						Ρ
×	X	Р	Р		Ρ	Ρ	Р	Р
×	R2	U*	R⁺			Р	U*	Р
×	R2	U *	U*	U*	U,	U ⁺	U*	R*
×	X	Р						Р
×	X	Р			Р	Р	Р	Р
X	X	R*	Р	Р	Р	Р	Р	Р
	X X X X X X X X X X X X X X X X X X X	Status Reg.'s X X X X X R2 X X X R2 X R2 X R2 X R2 X X X X X X X X X X X X X X X R2 X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X	X X P X P X R2 C* X R2 U* X X P X X P X X P X X P X X R2 R X R2 R* X R2 U* X R2 U* X R2 U* X X P X X Y X X P X X P X X P X X P X X P X X P X X P X X P X R2 U* X P X R2 U* X P X R2 U*	X X P X R2 C* U* X X P X R2 U* U* X X P X X P X X R2 R R* X R2 R R* X R2 R* R* X R2 U* P X R2 U* P X X X X R2 C* C* X X X X R2 U* P X X X X X P X X X X X P X X X X X P X X X P X X X P X X P X X P X X P X X P X X P X X P X X P X X P X X P X X P X X P X X P X X P X X P X X P X X P X X P X X P X X P	X X P X R2 C* U* U* X X P X X P X R2 U* U* P X X R2 R* R* C* X R2 R* R* C* X R2 U* P X R2 C* C* C* X R2 C* C* C* X R2 C* C* X X X X X Y X X Y X X Y X X Y X X Y X X Y X X Y X X Y X X P X X R2 U* R* X X Y X X P X X P X X P X R2 U* U* U* U* X R2 X P X X P X X P X R2 U* U* U* U*	X X P P X X P W* U* C* X R2 C* U* U* P X X P V V X X P V C* C* X R2 R* R* C* C* C* X R2 U* P V V V X R2 U* P V	X X P F P X X P T P X R2 C* U* U* C* C* X R2 U* U* P T X X P T C* C* C* X R2 R* R* C* C* C* C* X R2 U* P T U* U* X R2 C* <	X X P P P X R2 U* U* U* C* C* C* X R2 U* U* P U* C* C* C* X R2 U* U* P U* T P X X P U* C* C* C* U* X R2 R* R* C* C* C* C* C* X R2 U* P U* U* C* P X R2 U* P U* U* U* C* X R2 U* C* C* U* P X X U* U* U* U* U* U* X X P P P P P P P U* U*

	Species Status	State Reg.'s	Southeast	Southcent	Southwest	Western	Morehmest	Interior	Arctic
ORDER PASSERIFORMES (Cont.)									
Western Tanager Piranga ludoviciana	X	R2	U*					Р	Р
Scarlet Tanager <i>Piranga olivacea</i>	X	×		Р					Р
Brambling Fringilla montifringilla	×	X	Р	Р	R		Р		Р
Hawfinch Coccothraustes coccothraustes	×	X			Р				
Evening Grosbeak Hesperiphona vespertina	X	X	Р						
Bullfinch Pyrrhula pyrrhula	X	X	Р	Р	Р	Р	Ρ	Р	
Common Rose Finch Carpodacus erythrinus (Auth. 4)	X	X			Ř	R	R		
Purple Finch Carpodacus purpureus	X	X	Р						
Pine Grosbeak Pinicola enucleator	X	R2	C*	U*	U+	U [*]	U ⁺	U ⁺	R
Gray-crowned Rosy Finch Leucosticte tephrocotis	×	R2	U*	U*	C*	U*	U*	U ⁺	R *
Oriental Greenfinch Carduelis sinica	X	X			Р				
Hoary Redpoll Carduelis hornemanni	×	R2	R	R	С	C*	C*	C*	C*
Common Redpoll Carduelis flammea	×	R2	C*	C*	C*	C*	C*	C*	U [*]
Pine Siskin Carduelis pinus	×	R2	C*	C*	Р		Р	R*	Р
Red Crossbill Loxia curvirostra	X	R2	C*	R*	R		Р	Р	
White-winged Crossbill Loxia leucoptera	X	R2	C*	U*	U*	U*	U*	U*	Р
Savannah Sparrow Passerculus sandwichensis	X	R2	C*	C*	C*	C*	C*	C*	C*
Dark-eyed Junco Junco hyemalis	×	R2	C*	U*	R	U*	U*	C+	R*
Tree Sparrow Spizella arborea	×	R2	С	U*	U*	U*	U*	C+	U*
Chipping Sparrow Spizella passerina	X	R2	R*	Р			Р	U*	Р
Harris' Sparrow Zonotrichia querula	X	X	R	Р					Р

	Species Status	State Reg.'s	Southeast	Southcent	Southwest	western	Northweste	Interior	Arctic
ORDER PASSERIFORMES (Cont.)									
White-crowned Sparrow Zonotrichia leucophrys	×	R2	С	U*	C*	C*	C*	C*	U*
Golden-crowned Sparrow Zonotrichia atricapilla	X	R2	C*	C*	C*	C*	C*	U*	R
White-throated Sparrow Zonotrichia albicollis	X	X	Р	Р				Р	Р
Fox Sparrow Passerella iliaca	X	R2	C*	C*	C*	C*	C*	C*	U*
Lincoln's Sparrow Melospiza lincolnii	×	R2	C*	C*	U*	U*	U*	C*	
Song Sparrow Melospiza melodia	X	R2	C*	C*	C*				
Lapland Longspur Calcarius lapponicus	×	R2	С	U*	C*	C ⁺	C*	C*	C*
Smith's Longspur Calcarius pictus	×	R2	Р					R*	Р
Snow Bunting Plectrophenax nivalis	X	R2	U*	U*	C*	C*	C*	C*	C*
McKay's Bunting Plectrophenax hyperboreus	×	R2		Р	U*	R.			
Little Bunting Emberiza pusilla	×	×			Ρ				Р
Rustic Bunting Emberiza rustica	×	×			R		Р		
Gray Bunting Emberiza variabilis	X	X			Ρ				
Pallas' Reed Bunting <i>Emberiza pallasi</i> (Auth. 4)	×	×					Ρ		P
Reed Bunting Emberiza schoeniclus	×	×			Р				

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Key to Codes Used in Table 1, Birds of Alaska, Occurrence by Region

(1) Species Status code legend:

X = No special status

FE = Species on the Federal Threatened and Endangered list SE = Species on the State Threatened and Endangered list

FS = Species defined by Forest Service as sensitive to land management practices

(2) State Regulations code legend:

X = Not generally used by humans for consumptive or non-consumptive purposes

R1 = Used recreationally and consumed R2 = Used non-consumptively for recreation

C = Used commercially S = Used for subsistence

(3) Frequency of Occurrence code legend:

C = Common U = Uncommon

R = Rare

P = Peripheral - casual or accidental occurrence, not annual

* = Breeder, known or probable

Blank indicates species does not occur in that region.

SNOWSHOE HARE



TABLE 2

MAMMALS OF ALASKA, Occurrence by Region

				e.X.	Aral	,s ^t		Stern	
	Species Status	State Reg.'s	Souther	Souther Souther	Souther Souther	Western	Morthue	Interior	Arctic
ORDER INSECTIVORA									
Masked Shrew Sorex cinereus	FS	X	С	С	С	С	С	С	С
St. Lawrence Island Shrew Sorex jacksoni	X	X					U		
Pribilof Shrew Sorex pribilofensis	X	X			U				
Dusky Shrew Sorex obscurus	X	X	С	С	С	С	U	С	U
Water Shrew Sorex palustris	X	×	U	U	R				
Glacier Bay Water Shrew Sorex alaskanus	X	X	U						
Arctic Shrew Sorex arcticus	X	X			U	С	С	С	С
Pygmy Shrew Microsorex hoyi	X	X		С	U	U		С	
ORDER CHIROPTERA									
Little Brown Myotis Myotis lucifugus	X	X	С	С	С	U		U	
Keen's Myotis <i>Myotis keenii</i>	X	X	R						
Long-legged Myotis <i>Myotis volans</i>	X	X	R			_			
California Myotis Myotis californicus	X	Х	R						
Silver-haired Bat <i>Lasionycteris noctivagans</i>	X	Х	R	R					
Big Brown Bat Eptesicus fuscus	X	X	R	R					
ORDER LAGOMORPHA									
Collared Pika Ochotona collaris	X	R1	U	С	R			С	
European Rabbit Oryctolagus cuniculus	X	R1		С					
Snowshoe Hare Lepus americanus	FS	R1	U	С	U	С	С	С	R
Arctic Hare Lepus arcticus	X	R1			С	С	С		

			a stal				estern			
	Species Status	State Reg.'s	Southeast	Southcent	Southwest	Western	Northweste.	Interior	Arctic .	
ORDER RODENTIA										
Woodchuck Marmota monax	×	R1						U		
Alaska Marmot Marmota boweri	×	R1					U	U	U	
Hoary Marmot <i>Marmota caligata</i>	X	R1	U	С	С			С		
Arctic Ground Squirrel Spermophilus parryii	X	R1	U	С	С	С	С	С	С	
Red Squirrel Tamiasciurus hudsonicus	FS	R1	С	С	U	С	U	С	R	
Northern Flying Squirrel Glaucomys sabrinus	×	R1	С	U				С		
Beaver Castor canadensis	FS	C R1	С	С	U	С	С	С		
Deer Mouse Peromyscus maniculatus	FS	×	С							
Sitka Mouse Peromyscus sitkensis	FS	×	С							
Bushy-tailed Woodrat Neotoma cinerea	×	X	R							
Northern Red-backed Vole Clethrionomys rutilus	FS	X	С	С	С	С	С	С	С	
Gapper's Red-backed Vole Clethrionomys gapperi	FS	×	С							
Meadow Vole Microtus pennsylvanicus	×	X	С	U	U	U	U	С	R	
Tundra Vole <i>Microtus oeconomus</i>	X	×	С	С	С	С	С	С	С	
Long-tailed Vole Microtus longicaudus	X	×	С	U				U		
Coronation Island Vole Microtus coronarius	×	×	С							
Yellow-cheeked Vole Microtus xanthognathus	×	×				U		С	X	
Singing Vole Microtus miurus	×	×		С			С	С	С	
Insular Vole <i>Microtus abbreviatus</i>	×	×				U				
Muskrat Ondatra zibethicus	×	C R1	U	С	U	С	С	С		

Table 2 – 3					(a)			erc	
	Species Status	State Reg.'s	Southeas	Southcen	Southweek	Nestern	Morehiness	Interior	Arctic Arctic
ORDER RODENTIA (Cont.)									
Brown Lemming Lemmus sibiricus	×	×		С	С	С	С	С	С
Black-footed Lemming Lemmus nigripes	×	×			U				
Northern Bog Lemming Synaptomys borealis	×	×	U	U	U	U		U	
Collared Lemming Dicrostonyx torquatus	×	U						U	
Norway Rat Rattus norvegicus	X	×	С	С	С	R	U	U	
House Mouse Mus musculus	×	×	С	С	С	U	U	U	
Meadow Jumping Mouse Zapus hudsonius	×	×	U	С	С	U		С	
Western Jumping Mouse Zapus princeps	×	×	R						
Porcupine Erethizon dorsatum	FS	R2	С	С	С	С	U	С	R
ORDER CETACEA									
Baird's Bottle-nosed Whale Berardius bairdii	×	R1	U	U	U				
North Pacific Beaked Whale Mesoplodon stejnegeri	×	R1	R	R	R				
Goose-beaked Whale Ziphius cavirostris	×	R1	U	U	U				
Sperm Whale Physeter catodon	FE	R1	U	U	U				
White Whale or Beluga Delphinapterus leucas	FS X	S R1		R	С	С	С		С
Narwhal Monodon monoceros	×	R1							Р
Striped Porpoise Stenella coeruleoalba	×	R1	Р						
Northern Right-Whale Dolphin Lissodelphis borealis	×	R1	R						
Pacific White-sided Dolphin Lagenorhynchus obliquidens	×	R1	С	U	U				
Killer Whale Orcinus orca	×	R1	U	U	U	R	R		R
Grampus or Risso's Dolphin Grampus griseus	X	R1	R						

Table 2 — 4									
	Species Status	State Reg.'s	Southeas	Southcen	southwest	Western	Northwester	Interior	Arceic
ORDER CETACEA (Cont.)									
Common Pilot Whale Globicephala melaena	X	R1	R		Р				
Harbor Porpoise Phocoena phocoena	X	R1	С	С	С	R	R		R
Dall's Porpoise Phocoenoides dalli	FS	S R1	С	С	С				
Gray Whale Eschrichtius robustus	×	S R1	С	С	С	С	С		С
Fin Whale Balaenoptera physalus	FE	R1	U	U	U				
Sei Whale or Roqual Balaenoptera borealis	FE	R1	U	U	U				
Little Piked or Minke Whale Balaenoptera acutorostrata	×	R1	С	С	С	R	R		
Blue or Sulphur-bottomed Whale Balaenoptera musculus	FE	R1		R	R	R			
Hump-backed Whale <i>Megaptera novaeangliae</i>	FE	R1	С	С	R	R			
Right Whale Balaena glacialis	FE	R1	R	R	R				
Bowhead Whale Balaena mysticetus	FE	S R1					U		U
ORDER CARNIVORA									
Coyote Canis latrans	×	C R1	U	С	U	U	U	С	U
Gray Wolf Canis lupus	FS	C,S R1	С	С	С	С	С	С	С
Arctic Fox Alopex lagopus	×	C,S R1		U	С	U	С	R	С
Red Fox Vulpes vulpes	×	C R1	U	С	С	С	С	С	U
Black Bear Ursus americanus	FS	S R1	С	С	U	С	С	С	
Grizzly Bear and relatives Ursus arctos	FS	S R1	С	С	С	С	С	С	С
Polar Bear Ursus maritimus	×	S R2					С		С
Raccoon Procyon lotor	×	R1	U		U				
Marten Martes americana	FS	C R1	С	С	U	С	U	С	

		Species Status	State Reg.'s	Southeast	Southcent	Southwest	Western	Morthwest	Ingerior	Arceic
C	DRDER CARNIVORA (Cont.)									
	rmine Austela erminea	X	C R1	С	С	С	С	С	С	С
	east Weasel Austela nivalis	X	C R1	R	С	С	С	С	С	С
	link <i>lustela vision</i>	X	C R1	С	С	С	С	С	С	U
	Volverine Sulo gulo	FS	S C	С	С	С	С	С	С	С
	iver Otter utra canadensis	FS	R1	С	С	С	С	U	С	
L	rince of Wales Otter <i>utra mira</i> Auth. 2)	FS	X	U						
	ea Otter <i>nhydra lutris</i>	FS	S R2	U	U	U				
	ynx elis lynx	FS	C R1	U	С	U	U	С	С	С
0	RDER PINNIPEDIA									
	orthern Fur Seal Fallorhinus ursinus	FS	S R2			С				
	orthern Sea Lion umetopias jubata	FS	S R2	С	С	С	U			
	alifornia Sea Lion alophus californianus	X	R2	Р						
	lalrus Idobenus rosmarus	FS	S R2			С	С	С		С
	arbor Seal hoca vitulina	FS	S R2	С	С	С	U	U		U
	libbon Seal hoca fasciata	X	S R2			С	U	U		U
	inged Seal hoca hispida	Χ	S R2				С	С		С
	earded Seal <i>rignathus barbatus</i>	X	S R2			С	С	С		С
	looded Seal Systophora cristata	X	R2			Р				
	orthern Elephant Seal Birounga angustirostris	X	S R2	U						

	Species Status	State Reg.'s	Southeast	Southcen	Southweek	Western	Northwes	ern	Arctic
ORDER ARTIODACTYLA									
Roosevelt Elk Cervus elephus roosevelti	FS	R1			U				
Sitka Black-tailed Deer Odocoileus hemionus sitkensis	FS	R1	С	U	U				
Moose Alces alces	FS	S R1	С	С	С	С	С	С	С
Caribou <i>Rangifer tarandus</i>	×	S R1		С	С	С	С	С	С
Bison Bison bison	×	R1		U		U		U	
Mountain Goat Oreamnos americanus	FS	R1	С	С	U				
Muskox Ovibos moschatus	X	S R1				U	U		U
Dall's Sheep Ovis dalli	×	S R1		С	U	U	U	С	С

AUTHORITIES for Nomenclature: Number 1) was used except where noted.

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- 2) ——— Alaska's Wildlife and Habitat Volume II. (Available from: Alaska Dept. of Fish and Game, 333 Raspberry Road, Anchorage, AK 99502) 1978.
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Key to Codes Used in Table 2, Mammals of Alaska, Occurrence by Region

(1) Species Status code legend:

X = No special status

FE = Species on the Federal Threatened and Endangered list SE = Species on the State Threatened and Endangered list

FS = Species defined by Forest Service as sensitive to land management practices

(2) State Regulations code legend:

X = Not generally used by humans for consumptive or non-consumptive purposes

R1 = Used recreationally and consumed R2 = Used non-consumptively for recreation

C = Used commercially S = Used for subsistence

(3) Frequency of Occurrence code legend:

C = Common U = Uncommon

R = Rare

X = Occurs, frequency unspecified

Blank indicates species does not occur in that region.

RAINBOW TROUT



TABLE 3

FRESHWATER AND ANADROMOUS FISH OF ALASKA¹ Occurrence by Region

(See footnote, p. 41)

				4	(8)		.6	arc	
	Species Status	State Reg.'s	Southeast	Southcen	Southwest	Western	WOrthwest's	Interior	Arceic
ORDER PETROMYZONTIFORMES (PETROMYZONTIA: HYPEROARTII)									
Pacific Lamprey Entosphenus tridentatus	×	×	CA	CA	CA	CA	CA		
River Lamprey Lampetra ayresi	×	×	UA						
Arctic Lamprey Lampetra japonica	X	×		CF,A	CF,A	CF,A	UF,A	CF	UF
Western Brook Lamprey Lampetra richardsoni (Auth. 7)	×	X	UF						
Arctic Lamprey (nonparasitic) Lethenteron alaskense (Auth. 8)	×	X		UF	CF	CF	CF	CF	
ORDER ACIPENSERIFORMES									
Green Sturgeon Acipenser medirostris (Auth. 4, 5, 6, 8)	×	X	UA	UA	UA	RA			
White Sturgeon Acipenser transmontanus	X	R1	RA	UA	UA				
ORDER CLUPEIFORMES									
American Shad Alosa sapidissima (Auth. 4, 5, 6, 9)	×	X	UA	RA	RA .~				
Pacific Herring Clupea harengus pallasi	X	C R1	M	M	M	Μ	Μ		M
ORDER SALMONIFORMES									
Arctic Cisco Coregonus autumnalis	×	S,C R1					CA	CA	CA
Lake Whitefish Coregonus clupeaformis	×	×	CF	CF				CF	
Bering Cisco Coregonus laurettae	×	S		CF	CF	CF	CF	CF	CF
Broad Whitefish Coregonus nasus	X	C,S R1				CF,A	UF	UF	CF,A
Alaska Whitefish Coregonus nelsoni (Auth. 4, 5)	×	S R1				FC	FC	FC	

Table 3 – 2								.0	
	Species Status	State Reg.'s	Southeast	Southcent	Southwest	Western	Northweste	Interior	Arctic
ORDER SALMONIFORMES (Cont.)									
Humpback Whitefish Coregonus pidschian	X	C,S				CF,A	CF,A		CF,A
Least Cisco Coregonus sardinella	×	S,C R1			CF	CF	CF	CF	CF
Pink Salmon Oncorhynchus gorbuscha	FS	S,C R1	CA	CA	CA	CA	CA		UA
Chum Salmon Oncorhynchus keta	FS	S,C R1	CA	CA	CA	CA	CA	CA	UA
Coho Salmon Oncorhynchus kisutch	FS	S,C R1	CA	CA	CA	CA	RA	UA	
Sockeye Salmon Oncorhynchus nerka	FS	S,C R1	CA	СА	CA	CA	UA		
Chinook Salmon Oncorhynchus tshawytscha	FS	S,C R1	CA	СА	CA	CA	UA	CA	
Pygmy Whitefish Prosopium coulteri	X	X			CF	CF			
Round Whitefish Prosopium cylindraceum	×	S	UF	UF	CF	CF	CF	CF	UF
Mountain Whitefish Prosopium williamsoni	×	×	UF						
Cutthroat Trout Salmo clarki	FS	R1	CA	UA					
Rainbow Trout (Steelhead) Salmo gairdneri	FS	C R1	CF,A	CF,A	CF,A			CF,A	
Arctic Char Salvelinus alpinus	×	R1	UF		CF	CF	CF	CF	CF
Angayukaksurak Char Salvelinus anaktuvukensis (Auth. 3)	X	X							RF
Brook Trout Salvelinus fontinalis	×	R1	UF						
Dolly Varden Salvelinus malma	FS	S,C R1	CA,F	CA,F	CA,F	UA,F	UA,F	UA,F	RA,F
Lake Trout Salvelinus namaycush	×	R1	UF	CF	CF				
Inconnu Stenodus leucichthys	×	S,C R1			CF	CF	UF	CF	
Arctic Grayling Thymallus arcticus	×	S R1	CF	CF	CF	CF	CF	CF	CF
Pond Smelt Hypomesus olidus	×	×		CF	CF	CF	CF		

				25	8		Sign	ELL	
	Species Status	State Reg.'s	Southeast	Southcent	Southwast	Western	Northwest	Interior	Arctic
ORDER SALMONIFORMES (Cont.)									
Surf Smelt Hypomesus pretiosus	Х	R1	M	Μ	М				
Rainbow Smelt Osmerus mordax	X	S R1	CF,A	CF,A	CF,A	CF,A	CF,A		UF,A
Longfin Smelt Spirinchus thaleichthys	Х	C R1	CA,F	CA					
Eulachon <i>Thaleichthys pacificus</i>	FS	C R1	CA	CA	CA				
Alaska Blackfish Dallia pectoralis	X	S			CF	CF	UF	UF	CF
Northern Pike Esox lucius	FS	R1		UF	UF	CF	CF	CF	CF
ORDER CYPRINIFORMES (OSTARIOPHYSI-IN PART)									
Lake Chub Couesius plumbeus	X	R1				UF		CF	
Longnose Sucker Catostomus catostomus	X	×	CF	CF	CF	CF	CF	CF	UF
ORDER PERCOPSIFORMES (SALMOPERCAE: AMBLYOPSIFORMES))								
Trout-perch Percopsis omiscomaycus	X	X				R		R	
ORDER GADIFORMES (ANACANTHINI)									
Arctic Cod <i>Boreogadus saida</i> (Auth. 4, 5, 6, 9)	X	X				M	Μ		M
Saffron Cod Eleginus gracilis (Auth. 4, 5, 6, 9)	×	S R1	M	M	M	Μ	M		M
Pacific Cod Gadus macrocephalus (Auth. 4, 5, 6, 9)	X	C R1	Μ	M	M	M			
Burbot Lota lota	X	S R1		CF	CF	CF	CF	CF	FC
ORDER GASTEROSTEIFORMES (THORACOSTEI: HEMIBRANCHII: LOPHOBRANCHII: SOLENICHTHYES)									
Threespine Stickleback Gasterosteus aculeatus	X	X	CF,A	CF,A	CF,A	UF,A	UF,A		R
Ninespine Stickleback Pungitius pungitius	X	×		CF	CF	CF	CF		CF

Table 3 — 4	Species	State	Southeast	Southcent	sai Southwest	Western	Northwest	Interior	Arctic
	Status	Reg.'s	50°	SO	50	1/10	40	Inc	Ь,
ORDER PERCIFORMES (PERCOMORPHI: ACANTHOPTERGII)									
Shiner Perch Cymatogaster aggregata	X	X	Μ						
Sharpnose Sculpin Clinocottus acuticeps	X	X	M	M	M				
Coastrange Sculpin Cottus aleuticus	×	X	CF	CF	CF				
Prickly Sculpin Cottus asper	×	×	CF	CF					
Slimy Sculpin Cottus cognatus	×	×	CF	CF	CF	CF	CF	CF	UF
Pacific Staghorn Sculpin Leptocottus armatus	×	Х	Μ	M	M				
Fourhorn Sculpin Myoxocephalus quadricornis	X	Х					CF		CF
ORDER PLEURONECTIFORMES (HETEROSOMATA)									
Arctic Flounder Liopsetta glacialis (Auth. 4, 5, 6, 9)	X	X			M	M	M		M
Starry Flounder Platichthys stellatus	X	R1	M	M	M	M	Μ		M

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- 4) Morrow, J. E. "A New Species of Salvelinus from the Brooks Range, Northern Alaska." In: Studies on Alaskan Fishes. Biol. Pap. Univ. Alaska No. 13. Univ. of Alaska, College, 1973.
- 5) --- Illustrated Keys to the Fresh-water Fishes of Alaska. Alaska Northwest Publ. Co., Edmonds, 1974.
- 6) —— The Freshwater Fishes of Alaska. Corvallis Environmental Research Laboratory, U.S. Environmental Protection Agency, Corvallis, 1978.
- 7) Scott, W. B., and E. J. Crossman. *Freshwater Fishes of Canada*. Bulletin 184, Fisheries Research Board of Canada, Ottawa, 1973.
- 8) Vladykov, V. D., and Edward Kott. A New Non-parasitic Species of the Holarctic Lamprey Genus Lethenteron Creaser and Hubbs, 1922, (Petromyzonidae) from Northwestern North America with Notes on Other Species of the Same Genus. Biol. Pap. Univ. Alaska No. 19. Univ. of Alaska, College, 1978.
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Key to Codes Used in Table 3, Freshwater and Anadromous Fish of Alaska, Occurrence by Region

(1) Species Status code legend:

X = No special status

FE = Species on the Federal Threatened and Endangered list

SE = Species on the State Threatened and Endangered list

FS = Species defined by Forest Service as sensitive to land management practices

(2) State Regulations code legend:

X = Not generally used by humans for consumptive or non-consumptive purposes

R1 = Used recreationally and consumed

R2 = Used non-consumptively for recreation

C = Used commercially

S = Used for subsistence

(3) Frequency of Occurrence code legend:

CF = Common, freshwater

UF = Uncommon, freshwater

RF = Rare, freshwater

CA = Common, anadromous

UA = Uncommon, anadromous RA = Rare, anadromous

M = Marine species that frequently enter freshwater

Blank indicates species does not occur in that region

¹ This list is limited to anadromous and freshwater species and a few marine species that frequently enter freshwaters. The many strictly marine species have been excluded. For a more complete listing, see Quast, J. C., and E. L. Hall *List of Fishes of Alaska with a Guide to Some of Their Literature.* NOAA Tech. Rept. NMFS SSRF-658. NOAA, Seattle, 1972.

ROUGH-SKINNED NEWT

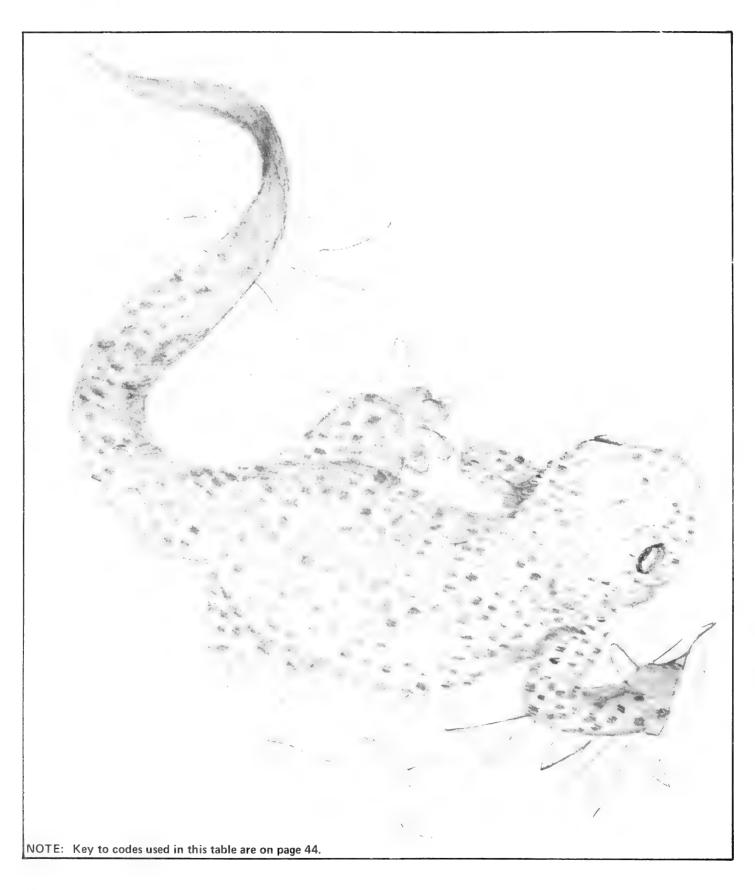


TABLE 4 AMPHIBIANS AND REPTILES OF ALASKA, Occurrence by Region

	Species Status	State Reg.'s	Southeast	Southcent	Southwest	Western	Northwest	ern Interior	Arctic
AMPHIBIANS									
ORDER CAUDATA									
Rough-skinned Newt Taricha granulosa	×	X	С	Р					
Northwestern Salamander Ambystoma gracile	×	×	Р						
Long-toed Salamander Ambystoma macrodactylum	×	X	U						
ORDER ANURA									
Western Toad Bufo boreas	×	×	С	U					
Spotted Frog Rana pretiosa	×	×	С						
Wood Frog Rana sylvatica	×	X	U	С	С	С	U	С	U
REPTILES									
ORDER CHELONIA									
Pacific Leatherback Turtle Dermochelys coriacea	FE	X	Р	Р	Р				
ORDER SQUAMATA									
Common Gartersnake Thamnophis sirtalis	Х	X	Р						

AUTHORITY for Nomenclature:

1) Dowling, Herndon G. "A Classification and Checklist of Amphibians and Reptiles Found in the United States and Canada" In: 1974 Yearbook of Herpetology, H. G. Dowling, ed. American Museum of Natural History, N.Y., 1975.

References for Regional Occurrence:

- 1) Hodge, R. P. Amphibians and Reptiles in Alaska, the Yukon, and Northwest Territories. Alaska Northwest Publishing Company, Anchorage, 1976.
- 2) Hodge, R. P. "Geographic Distribution: Dermochelys coriacea." SSAR Herpetological Review, 10(3):102. 1979.

Key to Codes Used in Table 4, Amphibians and Reptiles of Alaska, Occurrence by Region

(1) Species Status code legend:

X = No special status

FE = Species on the Federal Threatened and Endangered list SE = Species on the State Threatened and Endangered list

FS = Species defined by Forest Service as sensitive to land management practices

(2) State Regulations code legend:

X = Not generally used by humans for consumptive or non-consumptive purposes

R1 = Used recreationally and consumed R2 = Used non-consumptively for recreation

C = Used commercially S = Used for subsistence

(3) Frequency of Occurrence code legend:

C = Common

U = Uncommon

R = Rare

P = Peripheral

Blank indicates species does not occur in that region

WEATHERVANE SCALLOP

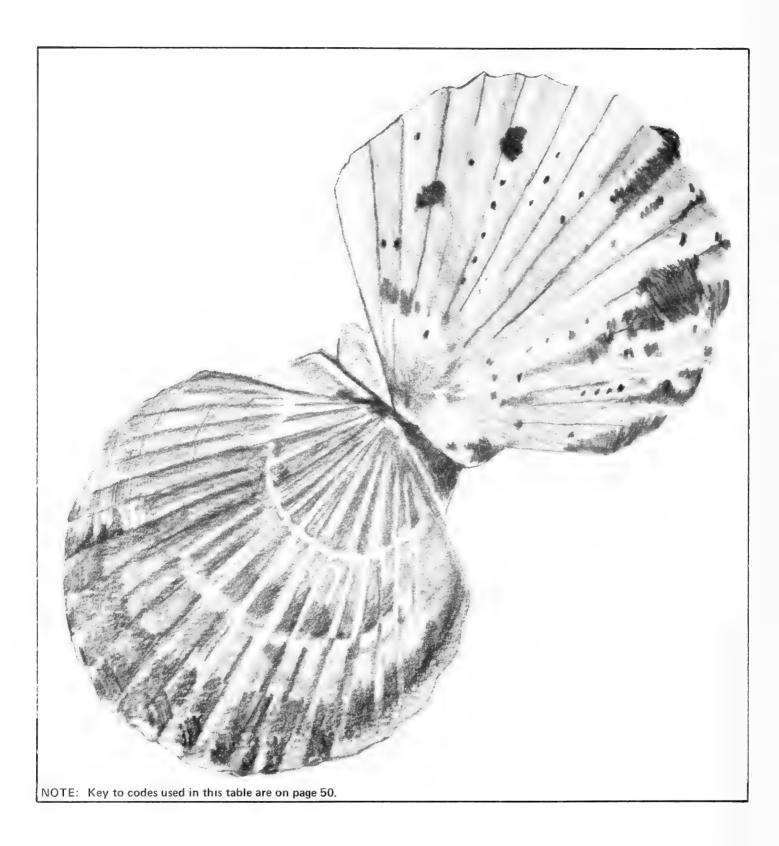


TABLE 5

COMMERCIALLY IMPORTANT INVERTEBRATES OF ALASKA, Occurrence by Region

	Species Status	State Reg.'s	Southeas	Southcan	Southwest	Western	Morehwestern Interior	Arctic
Brown or Golden King Crab Lithodes aquispina (Auth. 6)	FS	C,S R1	×	×	×			
Short Claw King Crab Paralithodes brevipes (Auth. 4)	X	C,S R1			X			
Red King Crab Paralithodes camtschatica (Auth. 4)	FS	C,S R1	X	X	X	X	×	
Blue King Crab Paralithodes platypus (Auth. 4)	FS	C,S R1	X	X	X	Х	X	X
Dungeness Crab Cancer magister (Auth. 6)	FS	C,S R1	X	X	X			
Tanner Crab Chionocoetes bairdi (Auth. 3)	FS	C,S R1	X	X	X	X		
Snow Crab Chionocoetes opilio (Auth. 6)	FS	C,S R1			X	X	X	X
Foraminate Box Crab Lopholithodes foraminatus (Auth. 6)	FS	S R1	X	Х				
Mandt's Box Crab <i>Lopholithodes mandtii</i> (Auth. 5, 6)	FS	S R1	X					
Hairy or Horse Crab <i>Telmessus cheiragonus</i> (Auth. 4, 6)	FS	S R1	X					
Bering Sea Hairy Crab Erimacrus isenbeckii (Auth. 4, 6)	FS	S (C)		X				
Red Rock Crab Cancer productus (Auth. 4, 6)	FS	S R1	X	X				
Shrimp (Sand Shrimp) Crangon sp. (Auth. 6)	FS	S R1	X	X	X	X	X	X

Table 5 − 2								
	Species Status	State Reg.'s	Southeast	Southcent	Southwest	Western	Northwestern Interior	Arctic
Broken-back Shrimp Heptacarpus sp. (Auth. 3)	FS	C,S R1	X	X	X	×	X	X
Side-striped Shrimp <i>Pandalopsis dispar</i> (Auth. 3)	FS	C,S R1	X	X	X	X		
Longtail Pink Shrimp Pandalus tridens (Auth. 6)	FS	C,S R1	X	X	X	X		
Pink Shrimp Pandalus borealus (Auth. 3)	FS	C,S R1	Χ	X	X	X	Х	
Humpy Shrimp <i>Pandalus goniurus</i> (Auth. 3)	FS	C,S R1	X	X	X	X	X	×
Spot Shrimp Pandalus platyceros (Auth. 3)	FS	C,S R1	X	X	X			
Ocean Pink Shrimp Pandalus jordani (Auth. 3)	FS	C,S R1	X	X	X			
Coon-stripe Shrimp Pandalus hypsinotus (Auth. 3)	FS	C,S R1	X	X	X	X		
Dock Shrimp Pandalus danae (Auth. 3)	FS	C,S R1	X	X				
Japanese Abalone <i>Haliotis kamtschatkana</i> (Auth. 5)	FS	C,S R1	Х	Х	Х			
Nuttall's Cockle <i>Clinocardium nuttallii</i> (Auth. 5)	FS	S R1	Х	Х	Х	X		
Alaska Surf Clam <i>Spisula alaskana</i> (Auth. 5)	FS	S R1	Х	Х	Х	Х	Х	×
Butter Clam Saxidomus giganteus (Auth. 5)	FS	S R1	Х	Х	Х			
Pacific Littleneck Protothaca staminea (Auth. 5)	FS	S R1	X	X	X			
Dall's Razor Clam <i>Siliqua alta</i> (Auth. 1)	FS	C,S R1		X	X	X	X	×

Table 5 – 3								^	
	Species Status	State Reg.'s	Southeast	Southcen	Southwes	Western	Northweste	Interior	Arctic Arctic
Pacific Razor Clam Siliqua patula (Auth. 5)	FS	C,S R1	X	X	X				
Weathervane Scallop Pecten caurinus (Auth. 5)	FS	C,S R1	Χ	Χ	Χ				
Japanese Oyster Crassostrea gigas (Auth. 5)	FS	C,S R1	Χ						
Northwest Neptuna Neptunea lyrata (Auth. 1)	FS	С	Χ	Х	X	Х			
Neptuna Neptunea pribiloffensis (Auth. 1)	FS	С	Χ	Х	Х	X			
Neptuna <i>Neptunea venosa</i> (Auth. 1)	FS	С			Χ	X			
Neptuna <i>Neptunea ventricosa</i> (Auth. 1)	FS	С			Х	Х			
Octopus Octopus dofleini (Auth. 3)	FS	C,S R1	Х	X	Х				
Octopus Octopus lieoderma (Auth. 3)	FS	C,S R1	Х	Х	X				
Red Sea Urchin Strongylocentrotus franciscanus (Auth. 3)	X	S (C)	X	X	X				
Green Sea Urchin Strongylocentrotus droebachiensis (Auth. 3)	FS	S (C)	Χ	X	X	X	X		X
Pale Sea Urchin Strongylocentrotus pallidus (Auth. 3)	X	S (C)	Χ	X	X	X	X		×
Purple Sea Urchin Strongylocentrotus purpuratus (Auth. 3)	XS	S (C)	X						
Aleutian Sea Urchin Strongylocentrotus polyacanthus (Auth. 2)	X	S (C)			X				
Red Sea Cucumber Parastichopus californicus (Auth. 3)	FS	S (C)	X	X					

AUTHORITIES for Nomenclature:

- 1) Abbott, R. T. American Seashells. 2nd Ed. Van Nostrand Reinhold Co., N.Y., 1974.
- Jensen, Margit. "The Strongylocentrotidae (Echinoidea), A Morphologic and Systematic Study." Sarsia 57:112-148. 1974.
- 3) Kozloff, Eugene N. Keys to the Marine Invertebrates of Puget Sound, the San Juan Archipelago, and Adjacent Regions. University of Washington Press, Seattle, 1974.
- 4) Makarov, V. V. "Fauna of the USSR, Crustacia," Vol. 10, No. 3. *Animura*, Academy of Sciences USSR, 1938, Translated by Israel Program for Scientific Translations by F. D. Por, 1962.
- 5) Morris, Percy A. Peterson Field Guide Series: A Field Guide to Pacific Coast Shells Including Shells of Hawaii and the Gulf of California. Houghton-Mifflin, Boston, 1968.
- 6) Rathbun, Mary J. "Decapod Crustaceans of the Northwest Coast of North America." In: Harriman Alaska Expedition, Vol. X Crustacea. Doubleday, Page, N.Y., 1904.

References for Regional Occurrence:

- 1) Abbott, R. T. American Seashells. 2nd Ed. Van Nostrand Reinhold Co., N.Y., 1974.
- 2) Johnson, M. E., and H. J. Snook. Seashore Animals of the Pacific Coast. Dover Publications, Inc., N.Y., 1955.
- 3) Morris, Percy A. Peterson Field Guide Series: A Field Guide to Pacific Coast Shells Including Shells of Hawaii and the Gulf of California. Houghton-Mifflin, Boston, 1968.
- 4) Rathbun, Mary J. "Decapod Crustaceans of the Northwest Coast of North America." In: Harriman Alaska Expedition, Vol. X Crustacea. Doubleday, Page, N.Y., 1904.
- 5) Ricketts, E. F., and J. Calvin. Between Pacific Tides. Stanford University Press, Stanford, 1948.
- 6) Wing, Bruce, Ph.D., Chief Oceanography Investigations, Auke Bay Fisheries Laboratory, Auke Bay, Alaska. Personal communication, 1979.

Key to Codes Used in Table 5, Commercially Important Invertebrates of Alaska, Occurrence by Region

(1) Species Status code legend:

X = No special status

FE = Species on the Federal Threatened and Endangered list SE = Species on the State Threatened and Endangered list

FS = Species defined by Forest Service as sensitive to land management practices

(2) State Regulations code legend:

X = Not generally used by humans for consumptive or non-consumptive purposes

R1 = Used recreationally and consumed

C = Used commercially

S = Used for subsistence

(C) = May be used commercially in near future

(3) Frequency of Occurrence code legend:

X = Occurs, frequency undetermined Blank indicates species does not occur in this region

PART II:

Frequency of Occurrence of Alaskan Species by Ecosystem

Definitions of Terms and Symbols

In this list wildlife and fish are listed by occurrence in major Alaskan ecosystems. Birds and land mammals are classified according to terrestrial ecosystems of coniferous forest and brush, tundra, etc. Freshwater fish, marine mammals, invertebrates and certain water fowl are classified according to aquatic habitats which include marine, estuarine, riverine, lacustrine and palustrine. Amphibians, reptiles, some birds and mammals are classified according to both aquatic habitats and terrestrial ecosystems.

The following are brief descriptions of the terrestrial ecosystems. 1

The coastal western hemlock and sitka spruce forest is a dense evergreen forest ecosystem. In Alaska, these forests are primarily western hemlock and Sitka spruce, with a scattering of mountain hemlock, lodgepole pine, western red cedar and Alaska cedar. Black cottonwood and red alder are common along streams, rivers and beach fringes. Subalpine and Pacific silver fir occur occasionally at treeline and near sea level. Throughout the system the forest understory has blueberry, huckleberry, copperbrush, Sitka alder, devilsclub, juniper, skunk cabbage and fern plants.

Bottomland spruce and poplar forest is a tall, relatively dense interior forest system of primarily white spruce, locally mixed with cottonwood or balsam poplar. Stands of white spruce are on level to nearly level floodplains and low river terraces. Cottonwood and balsam poplar usually occur with white spruce as a successional system. They are replaced at maturity by white spruce. Undergrowth is generally dense, consisting of high and low shrubs including American green alder, thinleaf alder, willow, rose, dogwood, Labrador tea and berry bushes. The forest floor is usually carpeted with ferns, bluejoint, fireweed, horsetails, lichens, herbs and moss. Portions of floodplains are barren during periods of low water, and some periodically flooded backwater areas contain meadows of tall grass with clumps of willow.

The Upland spruce and hardwood ecosystem is a fairly dense interior forest composed of white spruce, birch, aspen and poplar. Black spruce typically grows on north slopes and poorly drained flat areas. Root depths are shallow. Fire scars are common. White spruce occurs in mixed stands on south facing slopes and well drained soils, forming pure stands near streams. Aspen occurs in scattered stands along streams. Undergrowth consists of mosses with grasses on

drier sites and with brush on moist slopes. Typical plants are willow, alder, ferns, rose, high and low bush cranberry, raspberry, currant and horsetail.

Lowland spruce or hardwood forest is a dense to open interior lowland forest of evergreen and deciduous trees, including extensive pure stands of black spruce. Cones of black spruce open after fire and spread abundant seed, enabling black spruce to quickly invade burned areas. The stunted tamarack is associated with black spruce in the wet lowlands. The slow-growing black spruce and tamarack seldom reach a diameter of more than six inches. Rolling basins and knolls in the lowlands have a varied mixture of white spruce, black spruce, paper birch, aspen and poplar. Small bogs and muskegs are found in the depressions. Undergrowth species include willow, dwarf birch, low bush cranberry, blueberry, Labrador tea, crowberry, bearberry, cottongrass, ferns, horsetail, lichens and a thick cover of sphagnum and other mosses. Large areas burned since 1900 are covered by willow brush and very dense black spruce sapling stands.

A palustrine or muskeg and bog ecosystem is a treeless form of wetland, often developing in shallow ponds, depressions, or river margins. This low brush system is found in two areas: Coastal: Muskeg and bogs are usually found in wet, flat basins. Vegetation is varied, but commonly consists of a thick sphagnum moss mat, sedges, rushes, furticose lichens, cottongrass, Labrador tea, common juniper, crowberry, willow, cranberry, and blueberry. A few slow-growing, poorly formed shore pine, western hemlock or Alaska-cedar are scattered on drier sites. Shrubs are dominant over the sedge and herbaceous mat in exposed and drier areas. Ponds containing aquatic plants are often present in the peaty substrate. Interior: Extensive bogs are found where conditions are too wet for tree growth. Bog vegetation consists of varying amounts of sedges, sphagnum and other mosses, bog rosemary, resin birch, dwarf Arctic birch, Labrador tea, willow, cranberry, and blueberry. Localized saturated flats have large patches of cottongrass tussocks. Areas of tall willow, alder brush, and widely spaced dwarf spruce and tamarack are found within and around the marginal higher portions. Bog surfaces often have uneven, string-like ridges. These surfaces are too wet for shrubs.

¹The terrestrial ecosystems as described are those found on the Map of the Major Ecosystems of Alaska, produced by the Joint Federal-State Land Use Planning Commission for Alaska (July 1973), and can be purchased from U.S. Geological Survey.

High brush are dense to open deciduous brush systems. Coastal alder thickets are extensive Sitka alder thickets often having a well developed grass and fern layer below. Associated species are bluejoint, devilsclub, willow, Sitka mountain ash, currant, thimbleberry, salmonberry, blueberry and huckleberry. Floodplain thickets are similar from the rivers of the southern coastal areas to the broad-braided rivers north of the Brooks Range. They develop quickly on newly exposed alluvial deposits that are periodically flooded. The dominant shrubs are willows and alders. Associated shrubs are dogwood, prickly rose, raspberry, buffaloberry and high bush cranberry. Birch-alder-willow thickets are found near timberline in interior Alaska. They consist of resin birch, American green alder, thinleaf alder, and several willow species. Thickets may be extremely dense, or open and interspersed with reindeer lichens, low heath type shrubs, or patches of alpine tundra ecosystems. Other associated species are Sitka alder, bearberry, crowberry, Labrador tea, spirea, blueberry, and mountain cranberry.

Moist tundra ecosystems usually form a complete ground cover and are extremely productive during the growing season. They vary from almost continuous and uniformly developed cottongrass tussocks with sparse growth of other sedges and dwarf shrubs to stands where tussocks are scarce or lacking and dwarf shrubs are dominant. Associated species are arctagrostis, bluejoint, tufted hairgrass, mosses, alpine azalea, wood rush, mountain-avens, bistort, low-growing willows, dwarf birch, Labrador tea, green alder, Lapland rosebay, blueberry and mountain cranberry. Cottongrass-tussock type is the most widespread of all vegetative systems of Arctic Alaska. In the northern area, it is often dissected by polygonal patterns created by underlying ice wedges. On the Aleutian Islands moist tundra contains tall grass meadows interspersed with dense low heath shrubs.

Wet tundra is usually found in areas with little topographical relief. Standing water is almost always present in summer and numerous shallow lakes are common. In northern areas, permafrost is close to the surface, and microrelief features in the forms of polygons and peat ridges are formed by this action. Dominant vegetation is sedge and cottongrass, usually forming a mat rather than tussocks. A few woody and herbaceous plants occur on the drier sites above the water table. Rooted aquatic plants occur along shorelines and in shallower lake waters. Associated plants are lichens, mosses, low-growing willows, dwarf birch, Labrador tea, cinquefoil, beach rye, low bush cranberry and occasionally bog cranberry. Characteristic rooted aquatic plants are bur reed, pond weed, pendent grass, and mare's tail.

Alpine tundra systems are found on all mountain ranges of Alaska, and on exposed ridges in the Arctic and southwestern coastal areas. The system consists of barren rocks and rubble interspersed with low plant mats, both herbaceous and shrubby. White mountain-avens are dominant in northern areas and the Alaska Range and may cover entire ridges and slopes along with many low growing herbs, such as moss-campion, black oxytrope, Arctic sandwort, and several lichens, grasses and sedges. In southeastern coastal mountains and the Aleutians, the most prominent plants are low heath shrubs, especially cassiopes and mountain-heaths. They are most abundant where accumulated snow lingers into late spring. On the Aleutian Islands, this system consists primarily of crowberry, bog blueberry, mountain cranberry, alpine-azalea and several dwarf willows. Associated species are resin birch, dwarf Arctic birch, cassiope, crowberry, alpine-azalea, Labrador tea, mountain heath, rhododendron, Arctic willow, dwarf blueberry, bog blueberry, and cranberry.

The freshwater ecosystem is composed of lakes, rivers, glaciers, and icefields. Alaska's glaciers originate in mountainous areas with heavy precipitation where accumulation of one season's snowfall is not entirely melted before snow falls the succeeding winter. Major glacier forms represented include cirque, drift, valley, piedmont and icefields. Icefields are largest, followed by large valley and piedmont glaciers. Alpine tundra ecosystems are closely associated with the glacier system. High brush ecosystems occur along valley and piedmont glaciers. Some vegetation systems grow on glacial moraines atop the ice. Algae species occur on glaciers.

All flowing freshwater in Alaska is part of the **riverine** system. Riverine systems of Alaska are of two broad types, glacial and nonglacial. Most glacial rivers are in the southeast and southcentral regions. Characteristics of glacier runoff include high year-round average flows, peak flows in midsummer, distinct day-to-night differences in volume, high silt content of stream water and occasional outburst floods. All have pronounced effects on Alaskan streams. Nonglacial streams are typical in the Brooks Mountain Range, Arctic Slope and portions of interior and western Alaska. High rates of runoff and low temperatures cause Alaska streams to be less productive than waters at lower latitudes.

Alaska's lacustrine system includes more than three million lakes. In deep lakes, circulation is usually restricted; stratification is evident and a relatively large portion of the water mass is below the photosynthetic zone. Production of organic material in shallow lakes is higher because more water is circulated within the photosynthetic zone. Shallow lakes usually have aquatic plants in or near shore areas. Two major forms of plants are (1) rooted submerged aquatics such as bur reed, pond weed and other species, and (2) rooted emergent aquatics which are highly productive, resulting in accumulations of large amounts of top and root material along the shores.

The marine system encompasses ice affected and wave beaten coasts, the continental shelf and the ocean. Ice affected coasts are bordered by sea ice in winter, and ice may be offshore in summer. Marine plants grow in the lower strata of sea ice during early spring. These plants support abundant marine life. On the wave beaten coast, waves are the primary mixing agents. Wide, short estuaries support larvae and immature stages of most marine animal species. Plant production is high. The offshore zone to 200 meters depth contains one-celled plants which are the base of the marine food chain. Plant growth is dependent upon light received and the presence of nutrients. (Mixing by waves and currents brings nutrients to the lighted zone.) In the Bering-Chukchi Seas, one-celled plants develop in lower seaice strata. Shelf depths are shallow enough that abundant marine life occurs on the bottom. Dead marine life is consumed on the bottom by various animals, and is recycled to nutrients by enzymatic and bacterial action. Ocean areas are those where depth is greater than 200 meters. They have low plant productivity due to minimum mixing of water. As an exception, high productivity does occur in the Arctic Ocean due to plant growth in the lower layers of sea ice. In the oceanic system, plant and animal life is normally consumed between the surface and mid-depths. Little animal life occurs at the bottom where animals consume primarily dead organic matter.

The estuarine system includes fiord and tide mixed estuarines. Fiord estuarines are coasts eroded by glaciers in past ice ages. They are protected from direct pounding of sea waves. Water stratifies, which limits high plant production to early spring and otherwise maintains low production during the summer. In tidal mixed estuaries tides are the primary mixing force. Depths are generally less than 200 feet. In northern Cook Inlet, plant growth is inhibited by heavy sedimentation. Tidal action provides sufficient mixing of the water to produce high plant production in Kachemak Bay and southern Cook Inlet.

Reference occurrence of species by Alaskan ecosystems are cited after the authorities for nomenclature list at the end of each wildlife or fish group. The code X in the ecosystem indicates the species occurs there at some time. No effort was made to mark abundance within ecosystems. Some species have been seen so rarely it was impossible to mark ecosystem occurrence; in those cases an asterisk (*) appears after the name.

LONG-EARED OWL



TABLE 6

BIRDS OF ALASKA, Occurrence by Ecosystem

													_		
	- Marine	-Estuaria	- Rivering	- Lacustris	- Palustring	- Hemlock	- Spruce Poplar	-Upland spruce	- Muskeg. b.	- High brush	- Moist tundra m	- Wet tundra	- Moist s.	- Alpine tury	- Glaciers and Ice
ORDER GAVIIFORMES															
Common Loon Gavia immer	X	X		X		X									
Yellow-billed Loon Gavia adamsii	×	Х		X	X							X			
Arctic Loon Gavia arctica	X	Χ		X	X	X			×			X			
Red-throated Loon Gavia stellata	X	X		X	X	X			X			X			
ORDER PODICIPEDIFORMES															
Red-necked Grebe Podiceps grisegena	×	X	X	X	X	Х			×			X			
Horned Grebe Podiceps auritus	×	X		X		X	X	×							
Western Grebe Aechmophorus occidentalis	×	X													
Pied-billed Grebe Podilymbus podiceps	X	X		X											
ORDER PROCELLARIIFORMES															
Short-tailed Albatross Diomedea albatrus	×														
Black-footed Albatross Diomedea nigripes	X														
Laysan Albatross Diomedea immutabilis	X														
Northern Fulmar Fulmarus glacialis	X														
Pink-footed Shearwater Puffinus creatopus	×														
Flesh-footed Shearwater Puffinus carneipes	×														
New Zealand Shearwater Puffinus bulleri	×														
Sooty Shearwater Puffinus griseus	X														

- Marine - Estuarine - Riverine - Lacustrine - Palustrine - Marca- Poplar - Lowland spruce - Lowland spruce - Muskeg-bog - High brush - Moist tundra- mainland - Alpine tundra- Mainland

ORDER PROCELLARIIFORMES (Cont.)

Short-tailed Shearwater
Puffinus tenuirostris X

Manx Shearwater
Puffinus puffinus X

Scaled Petrel
Pterodroma inexpectata X

Cook's Petrel
Pterodroma cookii X

Fork-tailed Storm-Petrel

Oceanodroma furcata X

Leach's Storm-Petrel

Oceanodroma leucorhoa X

ORDER PELECANIFORMES

Double-crested Cormorant

Phalacrocorax auritus X X X X X X

Brandt's Cormorant

Phalacrocorax penicillatus X

Pelagic Cormorant
Phalacrocorax pelagicus X

Red-faced Cormorant

Phalacrocorax urile X

ORDER CICONIIFORMES

Great Blue Heron
Ardea herodias X X X X X X

Chinese Egret
Egretta eulophotes*
(Auth. 4)

Snowy Egret
Egretta thula*

American Bittern

Botaurus Ientiginosus X X X X

ORDER ANSERIFORMES

Whooper Swan
Olor cygnus X X

Whistling Swan
Olor columbianus

X X X X X X X X

Table 6 — 3													hand		Puplu	tian
							pruce	Var	ICe	, nce	50		ra-main	7	ra-ma _l	- Alpine tundra-Aleuti
	ine	-Estuaring	rine	- Lacustria	- Palustring	930/L	- Spruce. p	-Upland co	- Lowland	- Muskeg-bo	- High brush	St fund	- Wet tunde	ine tun	St tund	ine tun
	- Marine	-Estu	-Riverine	- Lac	$-P_{al_{L}}$	- Hemlock	-Spre	-Uple	h07-	- Mus	– Higi	- Mo,	- Wet tunder	- Alpine tuna	- Moist tunds-	- 4/p
ORDER ANSERIFORMES (Cont.)																
Trumpeter Swan Olor buccinator		X	X	~	~					X						
Canada Goose, Vancouver		^	^	^	^					^						
Branta canadensis fulva		Χ	Χ	X	X	X				Χ						
Canada Goose, Dusky Branta canadensis occidentalis		X	X		X					X	X					
Canada Goose, Aleutian Branta canadensis leucopareia	×	X		X	X					X					X	
Canada Goose, Cackling Branta canadensis minima	X	X		Х	X					Х		X				
Canada Goose, Taverner's Branta canadensis taverneri		X	X	X	X					X		X	X			
Canada Goose, Lesser Branta canadensis parvipes		X	X	X	X		X		X	X	X	X	X			
Brant Branta bernicla	X	Χ			Χ											
Emperor Goose Philacte canagica	X	X		X	X											
White-fronted Goose Anser albifrons		X		X	X					X		X	X		X	
Bean Goose Anser fabalis	X	X														
Snow Goose Chen caerulescens	X	X	X							X		X	X		X	
Ross' Goose Chen rossii		X		×												
Mallard Anas platyrhynchos		X	X	X	X	X	X	X	X	X	X	X	X		X	
Black Duck Anas rubripes		Х			X											
Spotbill Duck Anas poecilorhyncha (Auth. 4)		×														
Gadwall Anas strepera	×	X	X	X	X					X						
Pintail Anas acuta		X	X	X	X					X		X	X		X	
Falcated Teal Anas falcata				X											X	

Table 6 — 4													Pue		^{nl} and tian st ian	
		'ne	9	rine	ine in	- Hemlock Sh.	Poplar	Spruce	owland spruce	9-60g-6	rush	tundra	- Wet tundra	- Alpine tundr-	- Moist tundra-Aleutian - Alpine tundra-Aleutian - Glaciers and Ice	
	- Marine	- Estuarine	- Riverine	- Lacustrine	- Palustrine	- Hemlo	- Spruce-Poplar	- Upland spruce	le/MO?	- Muskeg-bog	- High brush	- Moist	- Wet tundra	- Alpine	- Moist _a - Alpine - Glacier	
ORDER ANSERIFORMES (Cont.)					٩											
Green-winged Teal Anas crecca		Х	X	Х	X	Х	X	X	×	Х		X	X		X	
Baikal Teal Anas formosa	X	Х			X											
Garganey Anas querquedula (Auth. 4)				X											×	
Blue-winged Teal Anas discors		Х	X	X	X					X						
Cinnamon Teal Anas cyanoptera		×		X												
Northern Shoveler Anas clypeata		X	X	X	X						X		×		X	
European Wigeon Anas penelope		X	X	X	X								X		X	
American Wigeon Anas americana		X	X	X	X								X		X	
Wood Duck Aix sponsa			X													
Redhead Aythya americana		×	X	X	×					X			X			
Common Pochard Aythya ferina		X														
Ring-necked Duck Aythya collaris		×		X	X								X			
Canvasback Aythya valisineria	X	X		X	X								X			
Greater Scaup Aythya marila	X	X		X	X								X		X	
Lesser Scaup Aythya affinis	X	X	X	X	X								X			
Tufted Duck Aythya fuligula		X		X												
Common Goldeneye Bucephala clangula	X	X	X	X	X	X	X			X					x	
Barrow's Goldeneye Bucephala islandica	X	X	X	X	X	X	X		X							
Bufflehead Bucephala albeola	X	X	X	X	X	X	X		X		X					

Table 6 — 5													nland	^{iinlan} d ^{utian} ^{eutian}
			b	5	v e	- Hemlock.s	Sori	aplar.	-Lowland Sp.	bog	6 48	- Moist tundes	dra ma,	undra-mainland - Moist tundra-Meutian - Albine tundra-Aleutian - Glaciers and Ice
	- Marine	- Estuarine	- Riverine	- Lacustring	-Palustrina	Hemlock	-Spruce-Post	-Upland sp	Lowland	- Muskeg-box	- High brush	Moist tu	- Wet tundra	Moist tu Alpine tu Glaciers
		'	'	1	1	'	1	'	1	1	1	1	1 1	1 1 1
ORDER ANSERIFORMES (Cont.)														
Oldsquaw Clangula hyemalis	X	X	X	X	X						X		Χ	X
Harlequin Duck Histrionicus histrionicus	Х	X	X			X	X				X			
Steller's Eider Polysticta stelleri	X	Х			X								×	
Common Eider Somateria mollissima	X	Х			X									
King Eider Somateria spectabilis	X	Х	X	X	X								×	×
Spectacled Eider Somateria fischeri	X				X								X	×
White-winged Scoter Melanitta deglandi	X	Х	X	X	X		X		X		X			
Surf Scoter <i>Melanitta perspicillata</i>	X	X	X	X	X		X		X		X			
Black Scoter Melanitta nigra	X	X	X	X	X								X	×
Ruddy Duck Oxyura jamaicensis	X	X		Χ										
Hooded Merganser Lophodytes cucullatus	X	X	X	X	X	X								
Smew Mergellus albellus		X												
Common Merganser Mergus merganser	X	X	X	X		X				X				
Red-breasted Merganser Mergus serrator	X	X	X	X	X						X		×	X
ORDER FALCONIFORMES														
Goshawk Accipiter gentilis		X			X	X	Χ	X	X	X	X			
Sharp-shinned Hawk Accipiter striatus		X			X	Х	X	X	X	X	X	X		
Red-tailed Hawk Buteo jamaicensis						X	X	X	×	×	X			
Swainson's Hawk Buteo swainsoni							X	X	X	X	X			

Table 6 — 6													puelu		inland	utian	eutian
				٥	b 0	d	John Call	aplar.	e o o o	eon	î 4	, de	ra ra	, 104,	dr. m.	'nd.	nd Ice
	– Marine	- Estuarina	-Riverine	- Lacustrine	- Palustrine	- Hemlock.C.	-Spruce Post	-Upland sp	-Lowland Sp.	- Muskeg-boo	- High brush	- Moist tundra	- Wer tundra	Alpine tu	- Moist tundes	- Alpine tund.	- Glaciers and Ice
	1	1	I	ı	1	1	1	1	ı	1	I	1	ı	1	ı	I	1
ORDER FALCONIFORMES (Cont.)																	
Rough-legged Hawk Buteo lagopus					Х					X		X	X		Х		
Golden Eagle Aquila chrysaetos									Х	X		X		Х			
White-tailed Eagle Haliaeetus albicilla															Х		
Bald Eagle Haliaeetus leucocephalus	X	X	X	X	X	X	X	Х	X	Х	X	X	X	X	X	X	
Steller's Sea Eagle Haliaeetus pelagicus	Χ	X													X		
Marsh Hawk Circus cyaneus		X		X	X					X		X	X	Х	X		
Osprey Pandion haliaetus	X	X	X	X													
Gyrfalcon Falco rusticolus			X		X					X		X	X	Х	X		
Peregrine Falcon, American Falco peregrinus anatum	X	X	X		X												
Peregrine Falcon, Peale's Falco peregrinus pealei	X	X			X												
Peregrine Falcon, Tundra Falco peregrinus tundrensis			X		X												
Merlin Falco columbarius	X	X			X	X	X	X	X	X	X						×
American Kestrel Falco sparverius		X				X	X	X	X	X	X						
ORDER GALLIFORMES																	
Blue Grouse Dendragapus obscurus						X			X	X				X			
Spruce Grouse Canachites canadensis						X	X	X	X	X	X						
Ruffed Grouse Bonasa umbellus							×			×	×						
Willow Ptarmigan <i>Lagopus lagopus</i>							X			X	X	X	X	×	×	×	×
Rock Ptarmigan Lagopus mutus										X	X	×	X	X	X	X	X

Table 6 - 7												Due		Puelu	ian	tian
						غ	воль.	lar Ce	$^{\theta O}$	~	- Moist tupe	a-main	- Alpine tuna	ra-ma _{ii}	- Alpine tuna	- Glaciers and Ice
	ę	· :	9 , 2	-Lacustei.	- Palustrine	- Hemlock - Sp.	- Spruce. Poss	-Upland spruce	- Muskeg. L.	- High brust	t tung	- Wer fund.	De tuna	t tund.	he tuna	-Glaciers and I _{Ce}
	- Marina	-Estuaria	- Rivering	- Lacu	- Palus	– Hem	-Spru	$-U_{\rho l_{a_{l}}}$	- Must	– H _{igh}	- Mois	- Wer	- 41pi	- Mois	- 4/pi	– <i>G</i> /ас,
ORDER GALLIFORMES (Cont.)																
White-tailed Ptarmigan Lagopus leucurus										X	X	X	X			Χ
Sharp-tailed Grouse Pedioecetes phasianellus							X	X	X	X						
ORDER GRUIFORMES																
Common Crane Grus grus *																
Sandhill Crane Grus canadensis		X			X				X		Χ	X		X		
Sora Porzana carolina					X											
European Coot Fulica atra *																
American Coot Fulica americana		X		X	X											
ORDER CHARADRIIFORMES																
Black Oystercatcher Haematopus bachmani	X															
Ringed Plover Charadrius hiaticula		X									X					
Semipalmated Plover Charadrius semipalmatus	X	X	X	X	X											
Little Ringed Plover Charadrius dubius* (Auth. 4)																
Mongolian Plover Charadrius mongolus	X	X			X											
Killdeer Charadrius vociferus		X	X	X	×				X		X					
Dotterel Eudromias morinellus													X			
American Golden Plover Pluvialis dominica	X	X			×						X	X	X			
Black-bellied Plover Pluvialis squatarola	X	X			X						X	X	X			

Table 6 – 8										land		nland tian	utian
					o .	Spruce	ruce	Spruce	4	ara-main	7	'dra-Aleu	ndra-Ale _u nd Ice
	- Marine	-Estuar	- Riverine	- Lacustria	- Palustrine	- Hemiock-Spruce	-Upland spruce	- Muskeg-bog - Hint	- Moist tur	- Wet tunds.	- Alpine tu	- Moist tundra-Mainland - Alpin	- Glaciers and Ica
ORDER CHARADRIIFORMES (Cont.)													
Black-tailed Godwit Limosa limosa		X											
Hudsonian Godwit Limosa haemastica		Х			Х			×		X			
Bar-tailed Godwit Limosa lapponica		X								X		X	
Marbled Godwit Limosa fedoa		X											
Eskimo Curlew Numenius borealis *													
Whimbrel Numenius phaeopus					×					X		×	
Bristle-thighed Curlew Numenius tahitiensis		X							X		X		
Far Eastern Curlew Numenius madagascariensis (Auth. 4)		×											
Upland Sandpiper Bartramia americana									X		X		
Redshank Tringa totanus		X											
Marsh Sandpiper Tringa stagnatilis * (Auth. 4)													
Greenshank Tringa nebularia		X											
Greater Yellowlegs Tringa melanoleuca	X	X		X	X			×	X	X			
Lesser Yellowlegs Tringa flavipes	X	Х		X	×			×	X	X			
Solitary Sandpiper Tringa solitaria			Χ	X	×			×	X	Х			
Wood Sandpiper Tringa glareola		X							X		X		
Willet Catoptrophorus semipalmatus *													
Terek Sandpiper Xenus cinereus (Auth. 4)	X	X											

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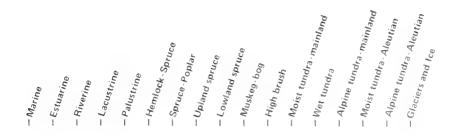
Table 6 — 9										nland	^{untan} ^{utran} eutian
	- Marine	-Estuaria	- Riverine	- Lacustria	- Palustria	- Hemlock · Spruce - Spruce · Poplar - Upland	- Lowland co	- Muskeg.bog - High brus	- Moist tundra	$-W_{et} t_{undr_a}$	Alpine tundra mainland - Moist tundra Aleutian - Alpine tundra Aleutian - Glaciers and Ice
ORDER CHARADRIIFORMES (Cont.)											
Common Sandpiper Tringa hypoleucos (Auth. 4)		×	×	X							
Spotted Sandpiper Actitis macularia	X	X	X	X	X					×	
Polynesian Tattler Heteroscelus brevipes	X	X									
Wandering Tattler Heteroscelus incanus	X	X	X								
Ruddy Turnstone Arenaria interpres	X	X	X						×		
Black Turnstone Arenaria melanocephala	X	X	X							X	X
Wilson's Phalarope Steganopus tricolor					X					X	
Northern Phalarope Lobipes Iobatus	X	X		X	X			X		X	
Red Phalarope Phalaropus fulicarius	X	X		X	X			X		X	
Common Snipe Gallinago gallinago		X		X	X		X			X	
European Jacksnipe Lymnocryptes minimus *											
Short-billed Dowitcher Limnodromus griseus	X	X			X			X			×
Long-billed Dowitcher Limnodromus scolopaceus	X	X			X			X		×	
Surfbird <i>Aphriza virgata</i>	X	X									X
Great Knot Calidris tenuirostris		X									
Red Knot Calidris canutus		X									×
Sanderling Calidris alba	X	X							×		
Semipalmated Sandpiper Calidris pusilla		×	X	Х	X					×	
Western Sandpiper Calidris mauri		X	X	X	X					×	×

Table 6 — 10									inland		^{u.nl} and ^e utian	leutian
	- Marine	– Estuarine – Riverine	- Lacustring	- Palustrine - Ho	- Spruce Poplar	- Lowiand Spruce	- Muskeg.bog	- Moist tund	- Wet tundra	- Alpine fundra-mail	- Alpina -	- Glaciers and Ice
ORDER CHARADRIIFORMES (Cont.)												
Rufous-necked Sandpiper Calidris ruficollis		x							X			
Little Stint Calidris minuta * (Auth. 4)												
Temminck's Stint Calidris temminckii (Auth. 4)		Х										
Long-toed Stint Calidris subminuta		X										
Least Sandpiper Calidris minutilla		X	X	X			X		×		X	
White-rumped Sandpiper Calidris fuscicollis		X							X			
Baird's Sandpiper Calidris bairdii	Х	Х	X	X				Х	X			
Pectoral Sandpiper Calidris melanotos		Х	X	X			X		X			
Sharp-tailed Sandpiper Calidris acuminata		X	X	X			X		X			
Rock Sandpiper Calidris ptilocnemis	X	X						X				
Dunlin Calidris alpina	X	X		X					X		×	
Curlew Sandpiper Calidris ferruginea		X							X			
Spoon-bill Sandpiper Eurynorhynchus pygmeus		×										
Broad-billed Sandpiper Limicola falcinellus*												
Stilt Sandpiper Micropalama himantopus		X	X	Х					Х			
Buff-breasted Sandpiper Tryngites subruficollis		×						×				
Ruff Philomachus pugnax		×							х			
Pomarine Jaeger Stercorarius pomarinus	X	×	X	×					X			

- Glaciers and Ice

Table 6 11							62)			θ.		Mainte	Pu _B .	^{- m} ainland Aleutian	·Aleutian ce
	- Marine	- Estuarine	- Riverine	- Lacustrina	- Palustrine	-Hemlock.c.	- Spruce Popl	-Upland Spring	- Lowland Spr.	- Muskeg-bog	- High brush - Moist	- Wes	- Alpine "	- Moist tundra-maintand - Alpina	- G _{laciers} and I _{Ce}
ORDER CHARADRIIFORMES (Cont.)															
Parasitic Jaeger Stercorarius parasiticus	X	X		×	X					X)	×	×	
Long-tailed Jaeger Stercorarius longicaudus	X	X)	××		
South Polar Skua Catharacta maccormicki	X														
Glaucous Gull Larus hyperboreus	X	Χ	X	X)	X	Χ	
Glaucous-winged Gull Larus glaucescens	X	X	X	X	X)	×		
Slaty-backed Gull Larus schistisagus	X	X													
Western Gull Larus occidentalis	X	X													
Herring Gull Larus argentatus	X	X	X	X	X	X		X)	×	X	
Thayer's Gull Larus thayeri	X	X	Χ	X											
California Gull Larus californicus	X	X													
Ring-billed Gull Larus delawarensis	X	X													
Mew Gull Larus canus	X	X	X	X	X							,	×	X	
Black-headed Gull Larus ridibundus	X	X													
Franklin's Gull Larus pipixcan	X	X													
Bonaparte's Gull Larus philadelphia	X	X	X	X	X	X	X		X	X)	×	X	
Ivory Gull Pagophila eburnea	X														
Black-legged Kittiwake Rissa tridactyla	X	X													
Red-legged Kittiwake Rissa brevirostris	X														
Ross' Gull Rhodostethia rosea	X														

Table 6 — 12					a.	- Hemlock-Spruce - Spruce-Poplar - Upland spruce - Lowland spruce - Lowland spruce - Muskeg-bog - High brush - Moist tundra- mainland - Mpine tundra- mainland - Alpine tundra- Aleutian - Alpine tundra- Aleutian - Glaciers and Ice
	- Marine	- Estuaria	- Riverine	- Lacustrin	- Palustrina	Strine - Hemlock-Spruce - Spruce-Poplar - Luland spruce - Lowland spruce - Muskeg-bog - High brush - Moist tundra-main - Moist tundra-main - Alpine tundra-Mai - Alpine tundra-Aleu - Glaciers and Ice
ORDER CHARADRIIFORMES (Cont.)						
Sabine's Gull Xema sabini	Х	X		Х	X	X X
Common Tern Sterna hirundo	X	X				
Arctic Tern Sterna paradisaea	Х	X	X	X	X	
Aleutian Tern Sterna aleutica	Х	X	Х		X	
Black Tern Chlidonias niger					×	
White-winged Black Tern Chlidonias leucopterus*						
Common Murre <i>Uria aalge</i>	X					
Thick-billed Murre <i>Uria lomvia</i>	Χ					
Dovekie Alle alle	X					
Black Guillemot Cepphus grylle	X					
Pigeon Guillemot Cepphus columba	Χ					
Marbled Murrelet Brachyramphus marmoratus	X	X				× ×
Kittlitz's Murrelet Brachyramphus brevirostris	X					×
Ancient Murrelet Synthliboramphus antiquus	Χ					X
Cassin's Auklet Ptychoramphus aleuticus	X					×
Parakeet Auklet Cyclorrhynchus psittacula	X					
Crested Auklet Aethia cristatella	X					
Least Auklet Aethia pusilla	X					
Whiskered Auklet Aethia pygmaea	X					



ORDER CHARADRIIFORMES (Cont.)

Rhinoceros Auklet

Cerorhinca monocerata X X X

Horned Puffin

Fratercula corniculata X X

Tufted Puffin

Lunda cirrhata X

ORDER COLUMBIFORMES

Band-tailed Pigeon

Columba fasciata

X

X

Rock Dove (urban)
Columba livia

Mourning Dove

Zenaida macroura

X X X

ORDER CUCULIFORMES

Common Cuckoo Cuculus canorus * (Auth. 4)

Oriental Cuckoo

Cuculus saturatus*

ORDER STRIGIFORMES

Scops Owl Otus scops *

Strix varia

Screech Owl
Otus asio X X

Great Horned Owl

Bubo virginianus X X X X X X X X X

 Snowy Owl
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Hawk Owl
Surnia ulula X X X X X X

Pygmy Owl

Glaucidium gnoma X

Barred Owl

Great Gray Owl
Strix nebulosa X X X X X

-Marina - Estuarina - Riverina - Palustrina - Palustrina - Hemlock- Spruce - Cowland spruce - Lowland spruce - Muskeg- bog - Migh brush - Moist tundra-mainland - Alpina tundra-Mainland

Х

ORDER STRIGIFORMES (Cont.)

Long-eared Owl Asio otus*

Short-eared Owl
Asio flammeus X X X X

Boreal Owl

Aegolius funereus X X X X

Saw-whet Owl
Aegolius acadicus X X X

ORDER CAPRIMULGIFORMES

Jungle Nightjar
Caprimulgus indicus*
(Auth. 4)

Whip-poor-will Caprimulgus vociferus*

Common Nighthawk
Chordeiles minor

X X X

ORDER APODIFORMES

Black Swift

Cypseloides niger X X X X X

Vaux's Swift
Chaetura vauxi X X X X

White-throated Needle-tailed Swift *Hirundapus caudacutus**

White-rumped Swift

Apus pacificus

X

Common Swift Apus apus *

Ruby-throated Hummingbird Archilochus colubris*

Anna's Hummingbird Calypte anna*

Rufous Hummingbird

Selasphorus rufus

X

X

X

X

X

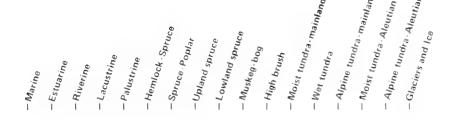
X

ORDER CORACIIFORMES

Belted Kingfisher

Megaceryle alcyon

X X X X



 $X \quad X \quad X \quad X$

ORDER CORACHFORMES (Cont.)

Hoopoe
Upupa epops*
(Auth. 4)

ORDER PICIFORMES

Wryneck ***					
Jynx torquilla*					
Common Flicker					
Colaptes auratus	Χ	Χ	Χ	X	Χ
Yellow-bellied Sapsucker					
Sphyrapicus varius	X				
Hairy Woodpecker					

Picoides villosus	Χ	Χ	Χ	Χ	X
Downy Woodpecker Picoides pubescens	Χ	×	X	×	X

Black-backed Three-toed Woodpecker Picoides arcticus	X	X	Χ	
Northern Three-toed Woodnecker				

ORDER PASSERIFORMES

Picoides tridactylus

Eastern Kingbird Tyrannus tyrannus	X
Western Kingbird Tyrannus verticalis	X

Yellow-bellied Flycatcher Empidonax flaviventris*		
Alder Flycatcher Empidonax alnorum	X	× ×

× ×	x x x x		Hammond's Flycatcher Empidonax hammondii
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Dusky Flycatcher Empidonax oberholseri*	
Western Flycatcher Empidonax difficilis	x x x x
Western Wood Pewee Contopus sordidulus	x



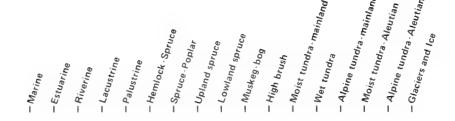
ORDER PASSERIFORMES (Cont.)																
Olive-sided Flycatcher Nuttallornis borealis						Х	X	X	X		X					
Skylark <i>Alauda arvensis</i>															X	
Horned Lark Eremophila alpestris		X												Х		
Violet-green Swallow Tachycineta thalassina		Х	X	X	Х		X	Х	X	Х	X					
Tree Swallow Iridoprocne bicolor		Х	Х	X	Х	X	Х	Х	X	X	Х				X	
Bank Swallow <i>Riparia riparia</i>		Х	Х	X	X	X	X	X	X	X	X					
Rough-winged Swallow Stelgidopteryx ruficollis		Х	Х	X	Х	X										
House Martin Delichon urbica *																
Barn Swallow Hirundo rustica		X	X	X	X	X	X	X	X	X	X					
Cliff Swallow Petrochelidon pyrrhonota		Х	X	X	X	X	X	X	X	X						
Purple Martin Progne subis		Х	Х	X	X	Х										
Gray Jay Perisoreus canadensis						Х	Х	X	X	Х	Х					
Steller's Jay Cyanocitta stelleri						Х	X	X								
Black-billed Magpie Pica pica		X				X	X	X	X	X	X				X	
Common Raven Corvus corax	X	X	X	X	Х	X	X	X	X	X	X	X	X	X	X	X
Northwestern Crow Corvus caurinus	Х	X	X			X										
Clark's Nutcracker <i>Nucifraga columbiana</i>						X										
Black-capped Chickadee Parus atricapillus						X	X	X	X		Х					
Mountain Chickadee Parus gambeli						X										

Wheatear

Oenanthe oenanthe

Table 6 — 17												inland		Pinland	^{utia} n eus.	uer
	$-M_{arin_{\Theta}}$ $-E_{SF}$	- Riverine	- Lacustrina	- Palustrine	- Hemlock.s	-Spruce. Pos.	-Upland so.	- Lowland Sp.	- Muskeg-box	- High brush	- Moist tunde.	- Wet tundra	- Alpine tund	- Moist tunde	- Alpine tundra-Aleutian - Glacio.	and Ice
ORDER PASSERIFORMES (Cont.)																
Gray-headed Chickadee Parus cinctus						X	X	X		X						
Boreal Chickadee Parus hudsonicus						X	X	X	X	X						
Chestnut-backed Chickadee Parus rufescens					X		X	X								
Red-breasted Nuthatch Sitta canadensis					X	X	X	X		X						
Brown Creeper Certhia familiaris					X	X	X	X		X						
Dipper Cinclus mexicanus	×	×	×													
Winter Wren Troglodytes troglodytes	×	(X					X						
Brown Thrasher Toxostoma rufum *																
American Robin Turdus migratorius	X	(X	X	X	×	X	X	X	X	X	X	X	
Eye-browed Thrush Turdus obscurus (Auth. 3)														×		
Dusky Thrush <i>Turdus naumanni</i> (Auth. 4)												×		×		
Fieldfare Turdus pilaris *																
Varied Thrush Ixoreus naevius	×	(X	X	X	X	X	X	X	X					
Hermit Thrush Catharus guttatus					X	X	X	X		X						
Swainson's Thrush Catharus ustulatus					X	X	X	X		X						
Gray-cheeked Thrush Catharus minimus					Х	X	X	X	X	X	X					
Mountain Bluebird Sialia currucoides					X			X	X	X						

 $X \quad X \quad X$



ORDER PASSERIFORMES (Cont.)

Bluethroat		
Luscinia svecica	X X X	X

Siberian Rubythroat

Luscinia calliope

X

Townsend's Solitaire

Myadestes townsendi X X X X X

Willow Warbler Phylloscopus trochilus*

Dusky Warbler Phylloscopus fuscatus*

Arctic Warbler
Phylloscopus borealis X

Middendorff's Grasshopper Warbler Locustella ochotensis*

Golden-crowned Kinglet

Regulus satrapa

X X X X X

Ruby-crowned Kinglet

Regulus calendula

X X X X

Red-breasted Flycatcher *Ficedula parva**

Sooty Flycatcher Muscicapa sibirica*

Gray-spotted Flycatcher X
Muscicapa griseisticta

Mountain Accentor

Prunella montanella X X

White Wagtail

Motacilla alba

X X X

Gray Wagtail

Motacilla cinerea
(Auth, 4)

Yellow Wagtail

Motacilla flava

X X X X

Indian Tree Pipit

Anthus hodgsoni
(Auth. 4)

- Marina - Estuarina - Rivarina - Lacustrina - Lalustrina - Hemlock-Spruca - Spruca-Poplar - Upland Spruca - Lowland Spruca - Muskeg-bog - High brush - Moist tundra-mainland - Moist tundra-mainland - Alpina tundra-mainland - Alpina tundra-Aleutian - Glaciers and Ica

ORDER PASSERIFORMES (Cont.)

_	THEE THOSE THE OTHER (OUTE)										
	echora Pipit Anthus gustavi									X	
	Red-throated Pipit Anthus cervinus								X		
	Bohemian Waxwing Bombycilla garrulus			X	X	X	X	X	X		
C E	Cedar Waxwing Rombycilla cedrorum			X				X			
	Brown Shrike anius cristatus *										
	Northern Shrike Lanius excubitor	X	X	X	X	X	X	X	Х	X	X
	starling St <i>urnus vulgaris</i>	X		X	X	X	X	X	X	X	
	Red-eyed Vireo Vireo olivaceus			X							
	Varbling Vireo Vireo gilvus			X							
	Black-and-white Warbler <i>Aniotilta varia</i> *										
	ennessee Warbler Vermivora peregrina			X							
	Orange-crowned Warbler Vermivora celata			X	X	X	X		X		
	rellow Warbler Dendroica petechia			X	X	X	X		X		
	Magnolia Warbler Dendroica magnolia			X	X	Х					
2	Cape May Warbler Dendroica tigrina *										
	Yellow-rumped Warbler Dendroica coronata			X	X	X	X		X		
	Townsend's Warbler <i>Dendroica townsendi</i>			Х	X	X	X		X		

Black-throated Green Warbler Dendroica virens *

Bay-breasted Warbler Dendroica castanea* Oporornis tolmiei

Dolichonvx oryzivorus*

Euphagus cyanocephalus*

Piranga olivacea *

- Marine - Estuarine - Riverine - Lacustrine - Palustrine - Palustrine - Palustrine - Hemlock Spruce - Lowland Spruce - Lowland Spruce - Lowland Spruce - Muskeg-bog - High brush - Moist tundra-mainlan - Moist tundra-mainlan - Alpine tundra-mainlan

Χ

ORDER PASSERIFORMES (Cont.)

Blackpoll Warbler					
Dendroica striata	X	X	Χ	Χ	X

Northern Waterthrush
Seiurus noveboracensis

X X X X X X X

MacGillivray's Warbler

Common Yellowthroat

Geothlypis trichas

X

X

X

Wilson's Warbler

Wilsonia pusilla

XXXXX

X

Canada Warbler
Wilsonia canadensis *

American Redstart
Setophaga ruticilla X

Setophaga ruticilla

Bobolink

Western Meadowlark

Sturnella neglecta X
Yellow-headed Blackbird

Xanthocephalus xanthocephalus *

Red-winged Blackbird

Agelaius phoeniceus X X

Rusty Blackbird

Funhagus carolinus X X X X X X

Euphagus carolinus X X X X Brewer's Blackbird

Common Grackle
Quiscalus quiscula X X X

Brown-headed Cowbird

Molothrus ater X X

Western Tanager

Piranga ludoviciana X

Scarlet Tanager

Brambling
Fringilla montifringilla *

Hawfinch
Coccothraustes coccothraustes *



Χ

ORDER PASSERIFORMES (Cont.)

Evening Grosbeak

Hesperiphona vespertina *

Bullfinch Pyrrhula pyrrhula*

Common Rose Finch Carpodacus erythrinus*
(Auth. 4)

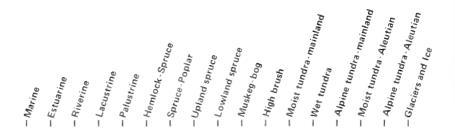
Purple Finch
Carpodacus purpureus *

Pine Grosbeak Pinicola enucleator		X	X	Χ	X	X				
Gray-crowned Rosy Finch Leucosticte tephrocotis	X	×		X	X	×	X	X	Х	X
Oriental Greenfinch Carduelis sinica*										
Hoary Redpoll Carduelis hornemanni		X	X	Х	×		X	X	X	X
Common Redpoll Carduelis flammea		X	×	X	×	×	X	X	X	
Pine Siskin Carduelis pinus		X	X	X	×	×			٠	
Red Crossbill Loxia curvirostra		X								

White-winged Crossbill
Loxia leucoptera X X X

 Junco hyemalis
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Spizella passerina X X X X X X Harris' Sparrow



ORDER PASSERIFORMES (Cont.)

White-throated Sparrow Zonotrichia albicollis*

Fox Sparrow Passerella iliaca \times \times \times \times \times Lincoln's Sparrow Melospiza lincolnii \times \times \times \times Χ Song Sparrow Melospiza melodia Χ Х X Lapland Longspur Х Χ \times \times \times Calcarius Iapponicus Χ Smith's Longspur Calcarius pictus Х Snow Bunting Χ Plectrophenax nivalis Χ Х Χ X X McKay's Bunting Plectrophenax hyperboreus Χ

Little Bunting Emberiza pusilla*

Rustic Bunting Emberiza rustica*

Gray Bunting Emberiza variabilis*

Pallas' Reed Bunting Emberiza pallasi* (Auth. 4)

Reed Bunting
Emberiza schoeniclus*

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NORTHERN FLYING SQUIRREL

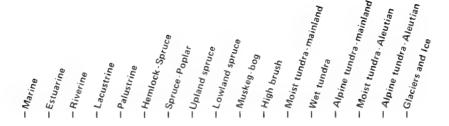


TABLE 7 MAMMALS OF ALASKA, Occurrence by Ecosystem

												Puelu		utian	⁹ utian
			٤	P 0		Spruce	oplar	e on no	spruce bos	5 4		'ara-mail Ir.	ra Indra-ma	odra. Aleu	"ndra-Al _l
	- Marine -Esti	- Riverine	- Lacustrino	-Palustrina	- Hemlock	- Spruce. p.	- Upland s.	-Lowland	- Muskeg. bo	- High brush	Moist tu	- Wet tundra	- Alpine lundra max.	- Alpine 1.	- Glaciers and Ice
	1 1	1	i i	ı	I	I	-1	I	1	I	1	I	1 1	I	I
ORDER INSECTIVORA															
Masked Shrew Sorex cinereus					X	X	X	X	X	X	X	X	Х		
St. Lawrence Island Shrew Sorex jacksoni											Χ	Χ	X		
Pribilof Shrew Sorex pribilofensis											X				
Dusky Shrew Sorex obscurus					X		X								
Water Shrew Sorex palustris		X	X	X	X						X	X	X		
Glacier Bay Water Shrew Sorex alaskanus					X										
Arctic Shrew Sorex arcticus							X	X	X	X		X	X		
Pygmy Shrew Microsorex hoyi						X	X	X	X		Χ				
ORDER CHIROPTERA															
Little Brown Myotis Myotis lucifugus		×		X	X	X		X	X	X	Х	X	X		X
Keen's Myotis Myotis keenii					X			X	X	X			X		X
Long-legged Myotis Myotis volans					X			X	X				X		X
California Myotis Myotis californicus					X			X	X				Х		X
Silver-haired Bat Lasionycteris noctivagans					X										
Big Brown Bat Eptesicus fuscus					X		X								
ORDER LAGOMORPHA															
Collared Pika Ochotona collaris											X		X		
European Rabbit Oryctolagus cuniculus											Х				

Table 7 — 2							e _{on.}	4	es es	Ce			Mainland		a - mainland	Aleutian	a-Aleutian ca
	- Marine	- Estuarine - Rii.	Werine	- Lacustrine - P.	alustrine	- Hemlock.c.	- Spruce-por	-Upland Sp.	- Lowland	- Muskeg-bo	- High brush	- Moist tun	- Wet tunds.	- Alpine tund	- Moist tund	- Alpine tun.	- Glaciers and Ico
ORDER LAGOMORPHA (Cont.)																	
Showshoe Hare Lepus americanus						Х	Х	X	Х	X	X	X	X				
Arctic Hare Lepus arcticus											X	X	X	×	Χ	X	
ORDER RODENTIA																	
Woodchuck <i>Marmota monax</i>							Х	Χ	Х			Х					
Alaska Marmot <i>Marmota boweri</i>											×			×			
Hoary Marmot <i>Marmota caligata</i>														Х			
Arctic Ground Squirrel Spermophilus parryii												X		Х			
Red Squirrel Tamiasciurus hudsonicus						×	X	X	Χ	X							
Northern Flying Squirrel Glaucomys sabrinus						×	X	X	X								
Beaver Castor canadensis		>	<	X		×	X	X	X	X	X						
Deer Mouse Peromyscus maniculatus						X			X	X	X			X			
Sitka Mouse Peromyscus sitkensis						X			X	X	X						
Bushy-tailed Woodrat Neotoma cinerea						Х					X			Χ			
Northern Red-backed Vole Clethrionomys rutilus						X	Х	X	X		X	Х	X				
Gapper's Red-backed Vole Clethrionomys gapperi*																	
Meadow Vole Microtus pennsylvanicus										X		X		X			
Tundra Vole Microtus oeconomus										X		Х		×	X	Х	
Long-tailed Vole Microtus longicaudus						×		X	Х	X	X	X	X	X			X
Coronation Island Vole Microtus coronarius						×			Х	X				X			X

Table 7 — 3													Puelu		hinland	utian	eutian
			5		911	- Hemiock	Spruce	oplar	- Lowland	. spruce	600	70	- Wet tunde	P	- Moist tund	- Alpine tuna	- Glaciers and Ice
	- Marine	-Estuaring	- Riverina	- Lacustric	- Palustring	- Hemloc	- Spruce. p.	-Upland s.	-Lowlanc	- Muskeg. bo	- High brush	- Moist tu	- Wet tunde	- Alpine	- Moist tu	- Alpine	- Glaciers
	ı	1	,	'	'	1	1	ſ	1	'	ı	ı	1	ı	ı	ı	1
ORDER RODENTIA (Cont.)																	
Yellow-cheeked Vole Microtus xanthognathus							X	X	X	X		X		X			
Singing Vole Microtus miurus												X		X			
Insular Vole Microtus abbreviatus													X				
Muskrat Ondatra zibethicus			X	X	X	Χ	Χ	X	Χ	X	X	X	X	X			X
Brown Lemming Lemmus sibiricus								X	X	X		X	X	X			
Black-footed Lemming Lemmus nigripes													X				
Northern Bog Lemming Synaptomys borealis						X	X	X	X	X	X	X		X			
Collared Lemming Dicrostonyx torquatus												X	X	X			
Norway Rat Rattus norvegicus						X	X	X	X	X	X	X	X	X	X	X	
House Mouse Mus musculus						X					X	X	X	X	X	X	
Meadow Jumping Mouse Zapus hudsonius						X	X	X	X	X	X	X	X				
Western Jumping Mouse Zapus princeps						X			X	X				X			
Porcupine Erethizon dorsatum						X	X	X	X	X	X	X	X	X			
ORDER CETACEA																	
Baird's Bottle-nosed Whale Berardius bairdii	Х																
North Pacific Beaked Whale Mesoplodon stejnegeri	Х																
Goose-beaked Whale Ziphius cavirostris	X																
Sperm Whale Physeter catodon	X																
White Whale or Beluga Delphinapterus leucas	X	X															



ORDER CETACEA (Cont.)

Narwhal	
Monodon monoceros	X

monodon monoccios	^
Strined Pornoise	

Ott iped i dipolac	
Stenella coeruleoalba	X

Northern Right-Whale Dolphin	
Lissodelphis borealis	Х

Pacific White-sided Dolphin	
Lagenorhynchus obliquidens	X

Killer Whale	
Orcinus orca	>

Grampus or Risso's Dolphin	
Grampus griseus	X

Harbor Porpoise		
Phocoena phocoena	X	Х

Dall's Porpoise	
Phocoenoides dalli	X

Gray Whale	
Eschrichtius robustus	×

Fin Whale	
Balaenoptera physalus	×

Sei Whale or Roqual	
Ralaenontera horealis	×

Dalachoptera Doreans	^
Little Piked or Minke Whale	

Х

Blue or Sulphur-bottomed Whale	
Balaenoptera musculus	Χ

Hump-backed Whale	
Megaptera novaeangliae	Х

Right Whale	
Balaena glacialis	X

Bowhead Whale	
Balaena mysticetus	Х

ORDER CARNIVORA

Balaenoptera acutorostrata

Coyote Canis latrans

Table 7 – 5													Puel		Puelu	tian	rtian
					a)		Spruce	p/ar	ruce	pruce	б _о ,	- 7	ara main	e :	'dra-maj	Jra-Aleu	dra-Ale
	- Marine	-Estuaria	- Rivering	- Lacustria	-Palustring	- Hemloct	- Spruce. p	-Upland	- Lowland	- Muskeg.b.	- High brust	Poist tun	- Wet tund.	Ipine tur	- Moist tung	- Alpine tuna	- Glaciers and Ice
	ν-	4	1	7-	4	1	SI	7-	7 –	- A	1	7 -	1	1	V -	1	S
ORDER CARNIVORA (Cont.)																	
Gray Wolf Canis lupus						Χ	X	Χ	X	X	X	X	Χ	×			×
Arctic Fox Alopex lagopus											X	X	X	Χ	X	X	×
Red Fox Vulpes vulpes						Х	Х	Х	Х	X	X	X	X	X	X	X	X
Black Bear Ursus americanus						X	X	X	X	X	X	X	X	X			Χ
Grizzly Bear and relatives Ursus arctos						X	X	X	X	X	X	X	X	X			X
Polar Bear <i>Ursus maritimus</i>	X	X										X	X				X
Raccoon Procyon lotor						X			X	X	X						X
Marten Martes americana						X	X	X	X	X				X			
Ermine Mustela erminea						X	X	X	X	X	X	X	X	X			X
Least Weasel Mustela nivalis							X	X	X	X	X	X	X	X			
Mink <i>Mustela vision</i>		Х	X	X		X	X	X	X	X	X	X	X				X
Wolverine Gulo gulo		X			X	X	X	X	X	X	X	X	X	X			
River Otter Lutra canadensis		X	X	X						X							
Prince of Wales Otter Lutra mira (Auth. 2)	X	×															
Sea Otter Enhydra lutris	X	X															
Lynx Felis lynx						X	X	X	X		X	×	X	X			
ORDER PINNIPEDIA																	
Northern Fur Seal Callorhinus ursinus	Х																
Northern Sea Lion Eumetopias jubata	X	×	X														

Table 7 — 6							nce	÷	6	,c ₀			mainland		a-mainland	Aleutian	^a -Aleutian Ica
	-Marine	- Estuarina	- Riverine	- Lacustrins	- Palustrine	- Hemlock - Sa	- Spruce. Pont	-Upland Spriis	- Lowland Spru	- Muskeg-boo	- High brush	- Moist tunds	- Wet tundra	- Alpine tunde.	- Moist tundra	- Alpine tunde	- Gl _{aciers} and I _{ca}
ORDER PINNIPEDIA (Cont.)																	
California Sea Lion Zalophus californianus	X	X															
Walrus Odobenus rosmarus	X										X	X	X	Х	Χ	X	×
Harbor Seal Phoca vitulina	X	X	X	X													
Ribbon Seal Phoca fasciata	Х	X									X	X	X	X	X	X	
Ringed Seal Phoca hispida	X	X									X	X	X	X	X	X	
Bearded Seal Erignathus barbatus	X	X									X	X	X	X	X	X	
Hooded Seal Cystophora cristata	Χ																
Northern Elephant Seal Mirounga angustirostris	X	X				X											
ORDER ARTIODACTYLA																	
Roosevelt Elk Cervus elephus roosevelti						X					X	X		X			
Sitka Black-tailed Deer Odocoileus hemionus sitkensis							X			X	X	X	X	X	X		
Moose Alces alces						X	X	X	X	X	X	X	X	X			X
Caribou Rangifer tarandus						X	X	X	X	X	X	X	X	X	X	X	
Bison Bison bison							Х	X	X	X							
Mountain Goat Oreamnos americanus						X			X	X				X			
Muskox Ovibos moschatus												X	X	X			
Dall's Sheep Ovis dalli							X	Х			X	Х		X			

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SALMON

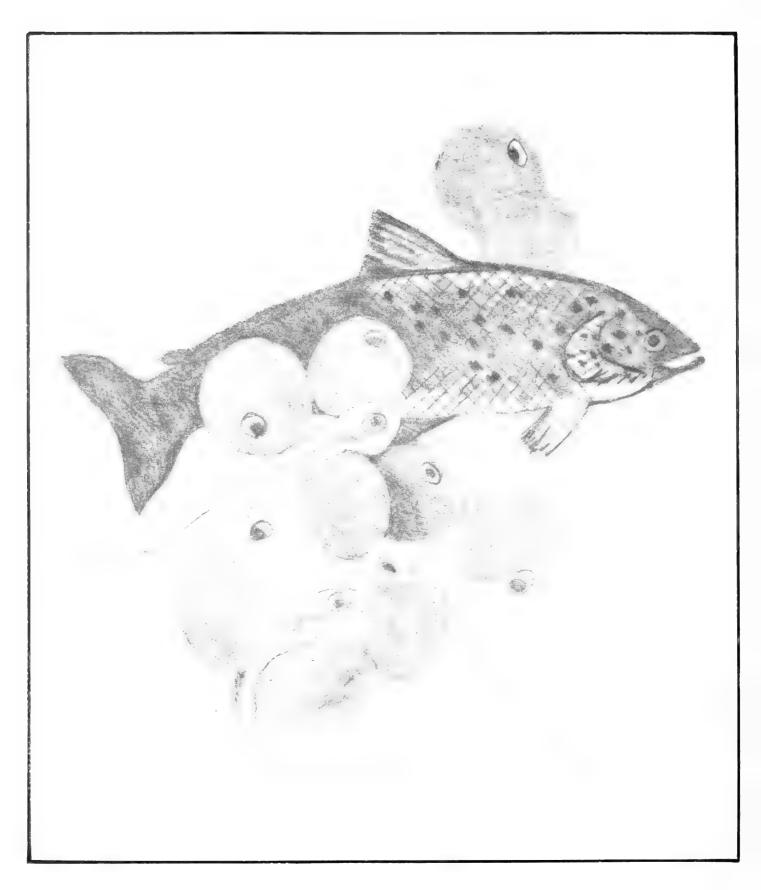


TABLE 8

FRESHWATER AND ANADROMOUS FISH OF ALASKA! Occurrence by Ecosystem

(See footnote, p. 91)

		Spruce olar	uce oruce	6	-Wet tundra - Alpine tund	- Moist tundra-mainland - Alpine tundra Aleutian - Glaciers and Leo
-Marine -Estuarine -Riverine	$-L_{acustrine}$ $-P_{alustrine}$	- Hemlock · Spruce - Spruce · Poplar - U.	- Lowland spruce - Muskeg ho	– High brush – Moist tund	-Wer tundra -Alpine tun	$-M_{0ist} tundra\cdot m$ $-A_{pine} tundra\cdot A_{le}$ $-G_{delers} and te_{e}$

ORDER PETROMYZONTIFORMES (PETROMYZONTIA: HYPEROARTII)

Pacific Lamprey Entosphenus tridentatus	×	Х	X
River Lamprey Lampetra ayresi	X	X	Χ
Arctic Lamprey Lampetra japonica	X	X	X
Western Brook Lamprey Lampetra richardsoni (Auth. 7)			X
Arctic Lamprey (nonparasitic) Lethenteron alaskense			X

ORDER ACIPENSERIFORMES

(Auth. 8)

Green Sturgeon Acipenser medirostris (Auth. 4, 5, 6, 8)	× × ×	K
White Sturgeon		

 \times \times \times

ORDER CLUPEIFORMES

Acipenser transmontanus

American Shad Alosa sapidissima (Auth. 4, 5, 6, 9)	Χ	×	X
Pacific Herring Clupea harengus pallasi	X	×	

ORDER SALMONIFORMES				
Arctic Cisco Coregonus autumnalis	×	X	Х	
Lake Whitefish Coregonus clupeaformis			X	X
Bering Cisco Coregonus laurettae		×	X	
Broad Whitefish Coregonus nasus		X	X	

- Alpine tundra-mainland - Alpine tundra-Aleutian - Moist tundra-mainland – Moist tundra. Aleutian – Hemlock · Spruce - Lowland spruce - Spruce. Poplar - Up_{land} spruce - Muskeg.bog - High brush - Wet tundra - Lacustrine - Palustrine - Riverine

ORDER SALMONIFORMES (Cont.)

(Cont.)				
			X	
	X	X	X	Χ
		X	X	Χ
	X	X	X	
	X	X	X	
	X	X	X	Χ
	X	X	X	Χ
	X	X	X	
			X	Χ
			×	Χ
			X	
	X	X	X	Χ
	X	X	X	X
	X	X	X	X
			Χ	
		X	X	X
	Х	X	X	Χ
			X	X
	Cont.)	x x x x x x x		<pre></pre>



ORDER SALMONIFORMES (Cont.)

Inconnu				
Stenodus leucichthys	X	Χ	X	X

Arctic Grayling		
Thymallus arcticus	X	X

Pond Smelt
Hypomesus olidus X X

Surf Smelt
Hypomesus pretiosus X X X

Rainbow Smelt
Osmerus mordax
X X X

Longfin Smelt
Spirinchus thaleichthys X X X

Eulachon
Thaleichthys pacificus X X X

Alaska Blackfish

Dallia pectoralis

X X X

Northern Pike

Esox Jucius X X X

ORDER CYPRINIFORMES
(OSTARIOPHYSI - IN PART)

Lake Chub
Couesius plumbeus X X

Longnose Sucker
Catostomus catostomus X X

ORDER PERCOPSIFORMES

(SALMOPERCAE: AMBLYOPSIFORMES)

Trout-perch
Percopsis omiscomaycus X X X

ORDER GADIFORMES (ANACANTHINI)

Arctic Cod

Boreogadus saida X X X X (Auth. 4, 5, 6, 9)

Saffron Cod
Eleginus gracilis X X X X X (Auth. 4, 5, 6, 9)

- Marine - Estuarine - Riverine - Lacustrine - Hemlock-Spruce - Spruce-Poplar - Upland spruce - Muskeg-bog - High brush - Moist tundra-mainland - Alpine tundra-Maitian

ORDER GADIFORMES (Cont.) (ANACANTHINI)

Pacific Cod Gadus macrocephalus (Auth. 4, 5, 6, 9)

 $X \quad X \quad X$

Burbot Lota lota

 $X \quad X \quad X$

ORDER GASTEROSTEIFORMES (THORACOSTEI: HEMIBRANCHII: LOPHOBRANCHII: SOLENICHTHYES)

Threespine Stickleback Gasterosteus aculeatus

 $X \times X \times X$

Ninespine Stickleback Pungitius pungitius

X X X X X

ORDER PERCIFORMES

(PERCOMORPHI: ACANTHOPTERGII)

Shiner Perch

Cymatogaster aggregata X X X

Sharpnose Sculpin

Clinocottus acuticeps X X X

Coastrange Sculpin

Cottus aleuticus X X

Prickly Sculpin

Cottus asper X X X X

Slimy Sculpin

Cottus cognatus X X

Pacific Staghorn Sculpin

Leptocottus armatus X X X

Fourhorn Sculpin

Myoxocephalus quadricornis X X X

ORDER PLEURONECTIFORMES (HETEROSOMATA)

Arctic Flounder

Liopsetta glacialis X X X X (Auth. 4, 5, 6, 9)

Starry Flounder

Platichthys stellatus X X X

AUTHORITIES for Nomenclature: Number 1) was used except where noted.

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- 3) ——— A Fish and Wildlife Resource Inventory of the Cook Inlet-Kodiak Areas, 2 vol., (Available from: Alaska Dept. of Fish and Game, 333 Raspberry Road, Anchorage, AK 99502), 1976.
- 4) ——— A Fish and Wildlife Resource Inventory of the Alaska Peninsula, Aleutian Islands and Bristol Bay Areas, 2 vol., (Available from: Alaska Dept. of Fish and Game, 333 Raspberry Road, Anchorage, AK 99502), 1977.
- 5) ——— A Fish and Wildlife Resource Inventory of Southeastern Alaska, Vol. I, (Available from: Alaska Dept. of Fish and Game, 333 Raspberry Road, Anchorage, AK 99502), 1977.
- 6) ——— A Fish and Wildlife Resource Inventory of Western and Arctic Alaska. (Available from: Alaska Dept. of Fish and Game, 333 Raspberry Road, Anchorage, AK 99502), 1977.
- Morrow, J. E. Freshwater Fishes of Alaska. Corvallis Environmental Research Laboratory, U.S. Environmental Protection Agency, Corvallis, 1978.

¹ This list is limited to anadromous and freshwater species and a few marine species that frequently enter freshwaters. The many strictly marine species have been excluded. For a more complete listing, see Quast, J. C., and E. L. Hall *List of Fishes of Alaska with a Guide to Some of Their Literature.* NOAA Tech. Rept. NMFS SSRF-658. NOAA, Seattle, 1972.

SPOTTED FROG



TABLE 9

AMPHIBIANS AND REPTILES OF ALASKA, Occurrence by Ecosystem



AUTHORITY for Nomenclature:

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DUNGENESS CRAB

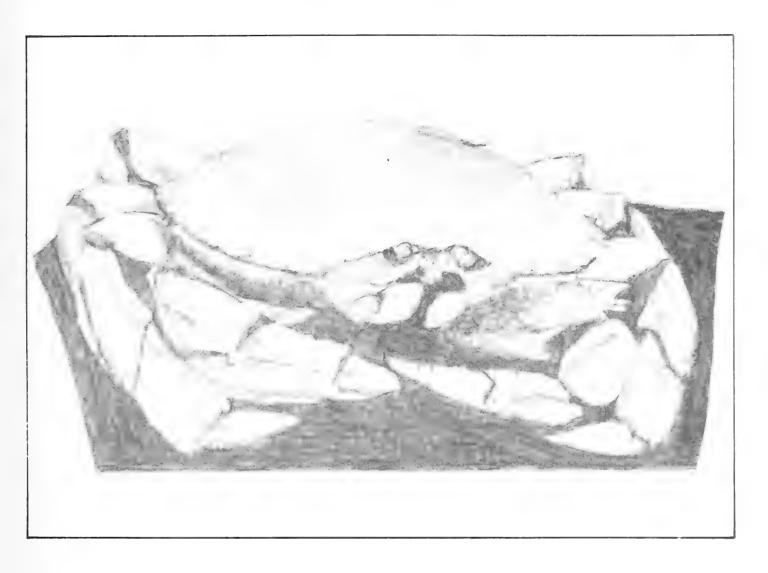


TABLE 10

COMMERCIALLY IMPORTANT INVERTEBRATES OF ALASKA, Occurrence by Ecosystem

	- Marine - Estuarine - Riverine - Lacustrine - Palustrine - Hemlock - Spruce - Spruce - Poplar - Lowland spruce - Lowland spruce - Muskeg - bog - High brush - Moist tundra-m - Wet tundra-m - Moist tundra-r - Alpine tundra-r
Brown or Golden King Crab <i>Lithodes aquispina</i> (Auth. 6)	x x
Short Claw King Crab Paralithodes brevipes (Auth. 4)	x x
Red King Crab Paralithodes camtschatica (Auth. 4)	x x
Blue King Crab Paralithodes platypus (Auth. 4)	x x
Dungeness Crab Cancer magister (Auth. 6)	x x
Tanner Crab Chionocoetes bairdi (Auth. 3)	× ×
Snow Crab Chionocoetes opilio (Auth. 6)	X
Foraminate Box Crab Lopholithodes foraminatus (Auth. 6)	×
Mandt's Box Crab <i>Lopholithodes mandtii</i> (Auth. 5, 6)	X
Hairy or Horse Crab Telmessus cheiragonus (Auth. 4, 6)	X
Bering Sea Hairy Crab Erimacrus isenbeckii (Auth. 4, 6)	×
Red Rock Crab Cancer productus (Auth. 4, 6)	×
Shrimp (Sand Shrimp) Crangon sp. (Auth. 6)	X

Table 10 — 2	almand and leutisan Aleutisan
	- Marine - Estuarine - Riverine - Riverine - Lacustrine - Palustrine - Hemlock Spruce - Spruce - Poplar - Upland Spruce - Lowland Spruce - Lowland Spruce - Muskeg - bog - High brush - Moist tundra - maimland - Moist tundra - Alpine tundra Aleutian - Glaciers and tee
Broken-back Shrimp Heptacarpus sp. (Auth. 3)	× ×
Side-striped Shrimp Pandalopsis dispar (Auth. 3)	× ×
Longtail Pink Shrimp Pandalus tridens (Auth. 6)	× ×
Pink Shrimp Pandalus borealus (Auth. 3)	× ×
Humpy Shrimp Pandalus goniurus (Auth. 3)	× ×
Spot Shrimp Pandalus platyceros (Auth. 3)	× ×
Ocean Pink Shrimp Pandalus jordani (Auth. 3)	× ×
Coon-stripe Shrimp Pandalus hypsinotus (Auth. 3)	× ×
Dock Shrimp Pandalus danae (Auth. 3)	× ×
Japanese Abalone Haliotis kamtschatkana (Auth. 5)	× ×
Nuttall's Cockle Clinocardium nuttallii (Auth. 5)	× ×
Alaska Surf Clam Spisula alaskana (Auth. 5)	× ×
Butter Clam Saxidomus giganteus (Auth. 5)	× ×
Pacific Littleneck Protothaca staminea (Auth. 5)	× ×
Dall's Razor Clam Siliqua alta (Auth. 1)	× ×

Table 10 — 3	uce r r ce ce mainland Aleutian a-Aleutian ce
	- Marine - Estuarine - Riverine - Lacustrine - Palustrine - Hemlock-Spruce - Spruce-Poplar - Upland spruce - Low/and spruce - Low/and spruce - Muskeg-bog - High brush - Moist tundra-mainland - Moist tundra-mainland - Moist tundra-Aleutian - Alpine tundra-Aleutian - Glaciers and Ice
Pacific Razor Clam Siliqua patula (Auth. 5)	X X
Weathervane Scallop Pecten caurinus (Auth. 5)	× ×
Japanese Oyster <i>Crassostrea gigas</i> (Auth. 5)	× ×
Northwest Neptuna <i>Neptunea lyrata</i> (Auth. 1)	× ×
Neptuna <i>Neptunea pribiloffensis</i> (Auth. 1)	× ×
Neptuna <i>Neptunea venosa</i> (Auth. 1)	× ×
Neptuna <i>Neptunea ventricosa</i> (Auth. 1)	× ×
Octopus Octopus dofleini (Auth. 3)	× ×
Octopus Octopus lieoderma (Auth. 3)	× ×
Red Sea Urchin Strongylocentrotus franciscanus (Auth. 3)	X
Green Sea Urchin Strongylocentrotus droebachiensis (Auth. 3)	× ×
Pale Sea Urchin Strongylocentrotus pallidus (Auth. 3)	× ×
Purple Sea Urchin Strongylocentrotus purpuratus (Auth. 3)	×
Aleutian Sea Urchin Strongylocentrotus polyacanthus (Auth. 2)	X X

X X

(Auth. 3)

Red Sea Cucumber Parastichopus californicus

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References for Ecosystem Occurrence:

- 1) Rathbun, Mary J. "Decapod Crustaceans of the Northwest Coast of North America." *In: Harriman Alaska Expedition, Vol. X Crustacea.* Doubleday, Page, N.Y., 1904.
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BOWHEAD WHALE



ENDANGERED AND THREATENED SPECIES

"Endangered" means a species or subspecies is in imminent danger of extinction in the wild, "Threatened" generally means likely to become endangered unless current trends are reversed. A species is listed only once if all its members are endangered or threatened. By contrast, endangered or threatened subspecies are listed individually in cases where all subspecies are not endangered or threatened. By law, federal agencies are required to improve the status of each endangered species until it can be removed from the list. Compared to the federal list. State endangered lists will often include additional species. Occurrence of a species on a state list is frequently an indication that it will later appear on the federal list.

Certain birds on the Alaskan Endangered Species List are migratory and may be observed passing through states in which they have not been listed as endangered, enroute to a seasonal stay at a remote destination. These include the Arctic peregrine falcon, whose route is from the Arctic tundra to South America, and the Eskimo curlew, whose route is from the far North to South America.

There are seven endangered species of whales off the Atlantic and Pacific coasts of North America, except that one, the Bowhead whale, is found only in northern zones, and another, the Gray whale, only in the Pacific. Alaska is the only western state that might sight them all.

TABLE 11 ALASKAN ENDANGERED SPECIES

Short-tailed Albatross Diomedea albatrus

Fin Whale Balaenoptera physalus (Source 1)

Aleutian Canada Goose Branta canadensis leucopareia Sei Whale or Rorqual Balaenoptera borealis

(Source 1)

Eskimo Curlew Numenius borealis Blue or Sulphur-bottomed Whale

Balaenoptera musculus

(Source 1)

American Peregrine Falcon Falco peregrinus anatum (Source 1)

Hump-back Whale Megaptera novaeangliae

(Source 1)

Arctic Peregrine Falcon

Falco peregrinus tundrensis White

Pacific Right Whale Eubalaena sieboldii

(Source 1)

Gray Whale Eschrichtius gibbosus

(Source 1)

Bowhead Whale Balaena mysticetus

(Source 1)

Sperm Whale Physeter catodon (Source 1)

Pacific Leatherback Turtle

Dermochylys coriacea

(Source 1)

Sources: Both references 1 and 2 list the species except where noted.

- "List of Endangered and Threatened Wildlife and Plants." Department of the Interior, Fish and Wildlife Service. In: 1) Federal Register. Most recently: Wednesday, January 17, 1979. Part II.
- 2) State of Alaska's endangered species Act: AS 16.20.180 through .210.

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